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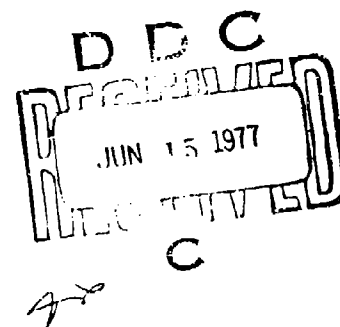
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HELICOPTER NOISE MEASUREMENTS  
DATA REPORT

Volume II Helicopter Models: Bell 212 (UH-1N),  
Sikorsky S-61 (SH-3A), Sikorsky S-64 "Skycrane" (CH-54B),  
Boeing Vertol "Chinook" (CH-47C)



April 1977  
Data Report



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Prepared for

**U.S. DEPARTMENT OF TRANSPORTATION**  
**FEDERAL AVIATION ADMINISTRATION**  
Systems Research & Development Service  
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Technical Report Documentation Page

1. Report No. <b>FAA-RD-77-57 - II 2</b>		2. Government Accession No.		3. Recipient's Catalog No. <b>11</b>	
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13. Type of Report and Period Covered <b>Data Report</b>				14. Sponsoring Agency Code	
15. Supplementary Notes <b>Refer to the main text in Volume I which describes the test program and data presentation format.</b>					
16. Abstract <p>This data report contains the measured noise levels obtained from an FAA Helicopter Noise Test Program. The purpose of this test program was to provide a data base for a possible helicopter noise certification rule. The noise data presented in this two volume report is primarily intended as a means to disseminate the available information. Only the measured data is presented in this report. All FAA/DOT data analysis and comparisons will be presented in a later report which is scheduled for distribution in July, 1977.</p> <p>The eight helicopters tested during this Helicopter Noise Test Program constituted a wide range of gross weights and included participation from several helicopter manufacturers. The helicopter models used in this test program were the Hughes 300C, Hughes 500C, Bell 47-G, Bell 206-L, Bell 212 (UH-1N), Sikorsky S-61 (SH-3A), Sikorsky S-64 "Skycrane" (CH-54B), and Boeing Vertol "Chinook" CH-47C. Volume I contains the measured noise levels obtained from the first four helicopters while Volume II contains the data from the remaining four.</p> <p>The test procedure for each helicopter consisted of obtaining noise data during hover, level flyover, and approach conditions. The data presented in this report consists of time histories, 1/3-octave band spectra, EPNL, PNL, dBA, dBD and OASPL noise levels.</p>					
17. Key Words <b>Helicopter Noise Levels; Hover; Level Flyover; Approach; Glide Slope; Time Histories; EPNL, PNL, dBA, dBD and OASPL.</b>			18. Distribution Statement <b>This document is available to the public through the National Technical Information Service Springfield, Virginia 22151</b>		
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DATA TABLE E

BELL 212 (UHIN)

TEST DATE: 10-6-76

TEST SITE: DULLES AIRPORT

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THE NOISE LEVELS PRESENTED IN SECTIONS IV, V AND VI  
HAVE BEEN TABULATED FOR THE SELECTED RUNS AND MICROPHONE  
LOCATIONS INDICATED ON THE FOLLOWING PAGE.



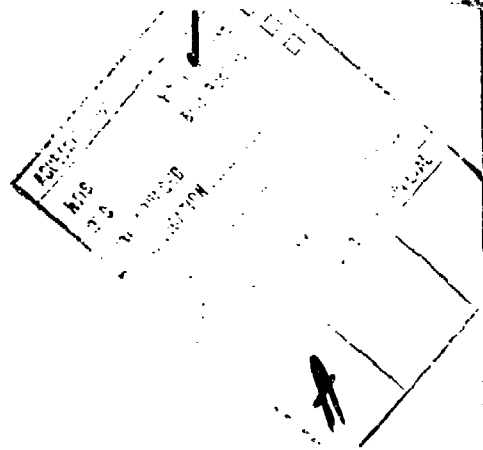


TABLE E-I  
LIST OF RUNS SELECTED FOR ANALYSIS

RUN#	TEST CONDITION	MICROPHONE LOCATION			
		WEST		EAST	
		150 m SIDELINE	CENTER LINE	CENTER LINE	150m SIDELINE
24	6° Approach 60 Kts	X		X	X
27	9° Approach 60 Kts	X		X	
29	Level Flyover 60 Kts			X	
30	↓			X	
31	↓			X	
32	99 Kts			X	
33	↓			X	
34	↓			X	
35	110 Kts			X	X
36	↓	X		X	X
37	114 Kts			X	
38	↓			X	
43	3° Approach 60 Kts	X		X	
44	Level Flyover 110 Kts	X		X	X
45	↓	X		X	X
46	114 Kts			X	
47	↓			X	
	Microphone Locations	Over Transpo Site Surface	Over Plywood	Over Transpo Site Surface	Over Transpo Site Surface
		381			

GENERAL COMMENTS

- o There were no problems encountered while testing the Bell-212 (UHIN).
- o The weather conditions during the test consisted of moderate winds with gusts in the 8-12 mph range.

TABLE E-II Ground and Flight Log Data

Helicopter Model: Bell 202 (UH1H)				Registration Number: U.S.F.F. Mussal 5				Test Date: 10/6/96									
Run	Time	Target Conditions		Actual Conditions		Ground Weather (10 ft.)		Comments									
		Type	Velocity	Altitude over MSL	DBA #	Heading	A/S		R/D	% or Torque	Altitude over MSL	RPM	CAT	Temp	RH	Wind Speed	Direction
1	1:29	Hover	0	5 ft.	94	0° N	C	0	23	5 ft.	64.5°F	↓					Abort (Circuit Time-off)
2	1:30				96	45° E			70								
3	1:32				96.5	90° E			70								
4	1:33				96.5	135° S			69								
5	1:34				98	180° S			69								
6	1:37				94.5	225° W			71								
7	1:38				95	270° W			71								
8	1:39				96.5	315°			71								
9	1:40				96	0° N			71								
10	1:41				—	0° N			71								
11	1:42				99	45° E			71								
12	1:43				98	90° E			69								
13	1:44				99.5	135° S			69								
14	1:45				99.5	180° S			69								
15	1:46				93	225° W			69								
19	2:05	Hover	0	500 ft.	79	180° S	0	0	65	500	↓						Abort
20	2:08				86	135° S			65								
21	2:09				85	90° E			70								
22	2:33	6° App	60 kts.	400 ft.	82	S	58	500 ft.	35	400	↓						Below 9° app. of 5:05 - then good possible interference. Hard-off small
23	2:36				84	↓			35	400							
24	2:41				82.5	↓			33	380							
25	2:49	9° App	60 kts.	400 ft.	84.5	S	60	700 ft.	20	400	↓						
26	2:53				86.5	↓			25	450							
27	2:57				85.0	↓			20	450							
28	3:00				83.5	↓			20	450							
Sound Level Meter		Located 100 ft		North of Hover position. Microphone		at grazing		incident to the noise.									

# Ground and Flight Log Data

TABLE E-II

Helicopter Model: Bell 412 (UH1H)      Payload: 1000 lbs      Test Date: 11/1/76

Run	Time	Target Conditions		Altitude ft	RPM	Pitch	Actual Conditions		RPM	Pitch	Temp	Ground Vibration (10 sec)		Comments
		Type	Velocity				A/S	F/D				FH	Spas	
29	3:02	Level Flight	60 kts	500 ft	79	S	60	0	500	0				
30	3:05				79.5	N	61	0	500	0				
31	3:08				79	S	61	0	500	0				
32	3:12		99 kts		84		100	0	500	0				
33	3:16				81		76	0	500	0				
34	3:17				83		78	0	450	0				
Stopped to refuel the helicopter and re-evaluated the microflares														
35	3:56	Level Flight	110 kts	500 ft	85	S	108	0	500	0				Available 100% compensation microflares take off (for away)
36	3:59				85		105	0	450	0				
37	4:00		114 kts		85.5		115	0	500	0				
38	4:02				85.5		100	0	450	0				
39	4:05	3° App	33 kts	400 ft	—		60	300	400	35				Abort Abort
40	4:07				—		60	300	400	35				
41	4:10				85		60	300	400	34				
42	4:13				81.5		58	300	300	34				
43	4:16				82.5		60	300	410	35				
44	4:21	Level Flight	110 kts	500 ft	82.5		108	0	450	0				
45	4:24				81.5		106	0	600	0				
46	4:26		114 kts		86.5		115	0	500	0				
47	4:28				85.5		116	0	510	0				

# TABLE E-III

Meteorological Data  
Dulles International Airport  
October 6, 1976

Time	Temp.	Bar. Press.	Rel. Hum	Wind Speed	Wind Direction	Remarks
(Hours	(°F)	(mm Hg)	( % )	(mph)	(Degrees)	
1315	67		65	10-11	160	Scat. Clds.
1330	66		66	9-10	185	
1345	68		64	8-10	195	
1400	68		64	10-11	200	
1415	69		61	9-10	180	
1430	69		60	9-10	180	
1445	70		58	9-10	170	
1500	69	753	59	14-16	180	
1515	68		60	12-14	170	
1530	68		59	9-11	180	
1545	69		58	8-9	170	
1600	70		58	7-8	180	
1615	70		58	10-12	160	
1630	70	753	56	10-11	190	

# TABLE E-IV

## HELICOPTER APPROACH AND FLYOVER NOISE DATA

BELL 212

OCTOBER 6, 1976

MICROPHONE OFFSET 150 METERS WEST  
(LEVELS-DB RE 20 MICRO PA)

EVENT	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	LEQ	DUR(A)	DUR(P)	TC
24	95.6	80.2	86.0	91.7	93.1	94.0	75.7	41.0	41.0	1.0
27	97.0	80.7	86.8	92.5	94.5	95.2	76.1	52.5	43.0	.7
36	96.9	81.9	88.4	95.0	95.3	95.3	78.9	27.0	27.5	.0
43	94.0	76.9	82.4	91.5	89.2	90.3	72.8	56.0	57.0	2.1
44	96.3	81.3	87.9	94.8	94.3	95.9	78.3	23.5	23.5	1.9
45	96.2	80.6	86.5	94.5	94.2	95.3	77.2	25.0	30.0	1.3

MICROPHONE OFFSET 150 METERS EAST  
(LEVELS-DB RE 20 MICRO PA)

EVENT	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	LEQ	DUR(A)	DUR(P)	TC
24	96.3	79.4	83.9	89.4	91.8	93.5	73.3	69.5	70.5	1.7
35	96.8	83.3	88.6	95.0	95.6	96.0	79.3	21.5	24.0	1.1
36	96.2	81.1	89.1	95.2	95.2	95.2	78.3	22.0	22.0	.0
44	95.7	80.3	89.2	95.3	94.7	94.7	77.6	23.0	23.5	.0
45	93.6	79.1	87.2	95.0	94.6	94.6	75.7	18.5	20.0	.0

# TABLE E-IV

## HELICOPTER APPROACH AND FLYOVER NOISE DATA

BELL 212

OCTOBER 6, 1976

CENTERLINE MICROPHONE ( SOFT SITE )  
(LEVELS-DB RE 20 MICRO PA)

EVENT	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	LE	DUR(A)	DUR(P)	TC
24	99.3	84.2	92.3	95.0	98.0	98.0	79.8	33.5	38.5	.0
27	100.6	85.2	93.4	95.8	99.3	99.3	81.2	36.0	35.5	.0
29	96.5	79.0	87.3	91.4	93.3	93.3	73.7	62.5	69.0	.0
30	94.4	79.3	87.0	91.0	93.0	93.0	74.2	35.0	44.5	.0
31	96.0	78.8	86.2	90.9	92.7	92.7	74.3	56.0	57.5	.0
32	96.7	83.7	90.8	93.3	97.2	97.2	78.2	24.5	26.0	.0
33	96.2	81.2	89.1	94.6	95.5	95.5	76.8	27.0	31.5	.0
34	96.3	81.8	88.9	95.0	95.4	95.4	77.2	24.5	27.5	.0
35	98.4	83.9	89.8	95.7	97.9	97.9	80.0	23.0	29.0	.0
36	98.3	86.0	91.8	96.1	99.9	99.9	80.3	21.5	22.5	.0
37	99.3	85.5	91.7	97.1	100.2	100.2	82.2	18.5	19.5	.0
38	101.8	86.0	94.7	100.2	101.3	101.6	83.8	20.0	20.5	1.1
43	98.4	82.9	89.1	93.8	96.9	96.9	79.1	29.0	57.0	.0
44	98.6	85.5	91.5	96.5	99.5	99.5	80.6	21.5	24.5	.0
45	96.2	81.1	88.5	94.9	95.7	95.7	76.7	26.0	31.5	.0
46	100.5	87.2	94.3	96.8	101.4	101.4	82.3	18.5	20.0	.0
47	98.0	83.6	90.0	97.2	98.3	98.3	80.0	22.0	23.0	.0

# TABLE E-V

## NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 24, 6 DEGREE APPROACH, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	69.2	75.9	83.9	83.3	83.3	14.1	6.7
4	66.9	74.3	82.7	81.2	82.2	14.3	7.4
7	65.9	73.2	82.4	79.5	80.9	13.9	7.3
10	69.4	76.1	83.5	82.7	82.7	13.3	6.7
13	73.4	78.6	85.7	85.8	85.8	12.4	5.2
16	68.5	76.8	85.6	83.6	83.6	15.1	8.3
19	71.7	79.7	87.2	86.1	87.1	14.4	8.0
22	75.4	80.8	87.4	88.0	89.1	12.6	5.4
25	76.3	81.3	87.4	88.3	89.8	12.0	5.0
28	72.4	79.5	87.3	86.9	86.9	14.5	7.1
31	76.6	82.1	87.6	89.3	90.6	12.7	5.5
34	76.1	80.5	86.3	88.1	88.1	12.0	4.4
37	73.8	79.2	86.4	86.9	88.4	13.1	5.4
40	73.6	79.4	86.6	86.8	86.8	13.2	5.8
43	72.8	78.1	85.0	85.6	86.7	12.8	5.3
46	73.2	79.0	85.1	86.2	87.7	13.0	5.8
49	72.8	78.4	83.8	85.3	85.3	12.5	5.6
52	73.5	78.9	83.2	86.4	87.8	12.9	5.4
55	77.0	81.8	85.7	89.2	90.5	12.2	4.8
58	77.2	82.4	86.4	89.2	89.2	12.0	5.2
61	76.1	82.0	88.1	89.4	89.4	13.3	5.9
OH 64 → 65	78.7	84.5	90.3	91.6	91.6	12.9	5.8
67	78.2	84.5	91.4	91.9	91.9	13.7	6.3
70	79.3	85.3	91.3	92.4	92.9	13.1	6.0
71	80.2	86.0	91.1	93.0	94.0	12.8	5.8
74	78.2	84.0	89.2	91.7	92.9	13.5	5.8
77	78.8	84.2	88.0	92.4	93.5	13.6	5.4
80	77.1	82.4	85.8	89.7	89.7	12.6	5.3
83	74.9	80.2	84.2	88.0	90.0	13.1	5.3
86	71.2	77.5	82.7	84.8	86.4	13.6	6.3
89	70.5	77.0	82.0	84.3	85.6	13.8	6.5
92	69.5	75.5	81.1	82.6	82.6	13.1	6.0
95	68.3	74.4	79.8	81.5	81.5	13.2	6.1
98	64.6	72.1	79.0	78.7	79.8	14.1	7.5
101	67.5	74.2	78.8	81.3	83.0	13.8	6.7



# TABLE E-V

## NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 27, 9 DEGREE APPROACH, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	66.9	75.2	83.2	82.0	83.2	15.1	8.3
4	69.0	74.5	82.7	82.0	82.0	13.0	5.5
7	66.7	73.9	82.6	81.1	81.1	14.4	7.2
10	70.1	75.7	82.4	83.3	84.6	13.2	5.6
13	75.9	80.1	84.6	87.8	89.0	11.9	4.2
16	72.1	77.6	84.3	85.0	86.2	12.9	5.5
19	74.4	78.8	84.3	86.7	88.3	12.3	4.4
22	69.1	76.1	84.0	83.6	84.6	14.5	7.0
25	74.6	79.4	84.9	87.2	88.8	12.6	4.8
28	74.3	79.3	85.4	87.5	87.5	13.2	5.0
31	75.9	80.7	86.1	88.7	88.7	12.8	4.8
34	78.0	82.7	86.7	90.2	90.2	12.2	4.7
37	78.6	83.2	86.8	91.2	93.0	12.6	4.6
40	76.5	80.7	85.4	89.4	92.0	12.9	4.2
43	73.1	79.0	85.1	86.7	89.1	13.6	5.9
46	77.6	82.3	86.7	90.1	91.7	12.5	4.7
49	78.7	82.7	86.2	90.7	90.7	12.0	4.0
52	75.9	81.0	84.6	88.4	88.4	12.5	5.1
55	77.5	82.5	85.2	90.0	91.9	12.5	5.0
58	75.9	81.3	84.7	88.8	90.3	12.9	5.4
61	76.5	82.2	85.3	89.4	89.4	12.9	5.7
64	78.1	83.7	87.5	91.0	91.0	12.9	5.6
67	79.4	85.4	90.2	92.7	92.7	13.3	6.0
OH - 70 - 71	77.9	84.0	90.5	90.7	90.7	12.8	6.1
73	78.5	84.6	92.0	91.5	91.5	13.0	6.1
76	79.8	86.0	92.5	93.5	94.1	13.7	6.2
78	80.7	86.8	92.4	94.5	95.2	13.8	6.1
81	77.6	83.5	88.9	90.8	92.1	13.2	5.9
84	77.8	83.5	86.3	90.6	92.1	12.8	5.7
87	76.1	81.4	84.8	89.5	89.5	13.4	5.3
90	74.8	80.7	84.1	87.9	90.2	13.1	5.9
93	72.9	79.2	83.2	86.4	86.4	13.5	6.3
96	69.8	75.9	81.2	83.3	84.4	13.5	6.1
99	68.4	75.2	81.2	82.1	82.1	13.7	6.8
102	65.2	72.5	80.2	79.4	79.4	14.2	7.3
105	66.8	73.1	79.4	80.6	82.3	13.8	6.3

# TABLE E-V

## NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 36, 110 KT. FLY BY, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
3	62.5	74.5	84.4	80.2	80.2	17.7	12.0
5	65.3	77.5	86.7	83.0	83.0	17.7	12.2
7	69.3	80.7	88.8	85.7	85.7	16.4	11.4
9	72.9	83.4	90.7	88.3	88.3	15.4	10.5
11	75.5	85.1	91.9	90.2	90.2	14.7	9.6
13	76.4	85.9	92.2	90.3	90.3	13.9	9.5
15	77.1	86.1	92.2	90.8	90.8	13.7	9.0
17	76.2	85.3	92.0	90.4	90.4	14.2	9.1
19	76.4	85.1	92.4	91.3	91.3	14.9	8.7
21	78.5	86.7	93.5	92.6	92.6	14.1	8.2
23	80.6	88.4	94.4	94.8	94.8	14.2	7.8
25	73.8	87.1	93.8	93.1	93.1	14.3	8.3
27	76.7	86.1	93.2	92.0	92.0	15.3	9.4
29	79.1	87.0	93.6	93.3	93.3	14.2	7.9
31	80.5	87.4	94.1	94.3	94.3	13.8	6.9
32	81.9	88.1	94.5	95.3	95.3	13.4	6.2
34	80.9	87.7	94.9	95.0	95.0	14.1	6.8
36	79.8	86.3	94.3	93.6	94.6	13.8	6.5
38	79.8	85.9	94.3	93.5	93.5	13.7	6.1
40	80.5	86.2	94.0	93.8	93.8	13.3	5.7
42	81.5	86.5	93.1	94.0	94.0	12.5	5.0
44	81.7	86.3	91.6	93.3	94.8	11.6	4.6
OK → 46	81.0	85.8	90.5	93.0	93.0	12.0	4.8
48	81.0	85.6	90.3	93.6	93.6	12.6	4.6
50	81.0	85.5	89.4	93.3	93.3	12.3	4.5
52	79.0	83.7	87.5	91.0	91.0	12.0	4.7
54	77.6	82.5	87.0	89.8	89.8	12.2	4.9
56	76.3	80.7	84.9	88.4	89.6	12.1	4.4
58	75.7	80.0	83.1	87.2	87.2	11.5	4.3
60	73.4	78.1	81.0	85.0	86.1	11.6	4.7
62	70.4	74.9	79.4	82.1	83.6	11.7	4.5
64	67.7	72.1	77.8	80.1	81.4	12.4	4.4
66	67.5	72.1	77.9	80.4	82.6	12.9	4.6
68	67.4	72.4	77.8	80.6	83.1	13.2	5.0

# TABLE E-V

## NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 43, 3 DEGREE APPROACH, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLI	PNL-DBA	DBD-DBA
1	57.7	69.8	80.8	76.3	76.3	18.6	12.1
4	58.8	70.7	81.5	77.4	77.4	18.6	11.9
7	60.8	71.7	81.5	78.2	78.2	17.4	10.9
10	65.6	73.9	82.0	80.5	80.5	14.9	8.3
13	68.2	76.1	83.0	82.4	82.4	14.2	7.9
16	67.3	76.0	83.5	82.0	82.0	14.7	3.7
19	67.4	76.8	84.9	82.7	82.7	15.3	9.4
22	65.2	75.4	84.2	81.7	81.7	16.5	10.2
25	64.9	73.8	83.1	80.2	80.2	15.3	8.9
28	66.5	74.7	83.6	81.1	81.1	14.6	8.2
31	69.5	77.4	85.2	84.0	84.0	14.5	7.9
34	71.2	78.9	86.3	85.6	85.6	14.4	7.7
37	70.8	78.6	86.2	84.9	84.9	14.1	7.8
40	71.7	79.0	86.0	85.9	85.9	14.2	7.3
43	67.4	75.6	84.1	82.4	83.6	15.0	8.2
46	66.2	74.8	84.4	81.4	82.5	15.2	8.6
49	68.4	76.5	85.7	83.1	83.1	14.7	8.1
52	68.9	77.2	86.1	83.9	85.1	15.0	8.3
55	71.3	77.8	86.2	84.8	86.5	13.5	6.5
58	70.7	77.4	86.2	84.3	86.3	13.6	6.7
61	72.8	78.3	85.8	85.4	85.4	12.6	5.5
64	71.2	77.2	84.9	84.3	84.3	13.1	6.0
67	73.4	78.2	84.7	86.1	87.2	12.7	4.8
70	73.4	78.5	85.2	85.9	87.0	12.5	5.1
73	75.1	80.2	86.0	88.0	88.0	12.9	5.1
76	74.8	79.8	84.8	87.6	88.8	12.8	5.0
79	75.3	80.4	83.8	87.3	89.1	12.0	5.1
82	75.4	80.7	84.0	87.9	87.9	12.5	5.3
85	75.9	81.2	84.4	87.8	89.7	11.9	5.3
86	76.1	81.4	85.0	88.2	90.3	12.1	5.3
89	76.5	81.5	86.9	88.3	88.3	11.8	5.0
92	76.5	82.0	89.3	88.8	88.8	12.3	5.5
94	76.0	81.8	90.8	88.3	88.3	12.3	5.8
95	76.3	82.3	91.3	89.1	89.7	12.8	6.0
98	75.7	81.5	90.6	88.8	89.4	13.1	5.8
101	75.0	80.3	88.3	87.2	87.2	12.2	5.3
104	74.8	80.4	86.0	87.4	89.3	12.6	5.6
107	73.7	79.5	83.2	86.5	87.6	12.8	5.8
110	71.0	76.7	81.7	84.1	85.5	13.1	5.7
113	70.1	75.7	80.1	82.8	82.8	12.7	5.6
116	68.0	74.5	80.5	81.8	83.2	13.8	6.5
119	66.6	72.9	78.7	80.2	82.2	13.6	6.3
122	62.6	69.9	77.2	76.8	78.2	14.2	7.3
125	61.9	69.2	76.5	75.9	75.9	14.0	7.3
128	59.0	67.4	75.3	74.6	76.4	15.6	8.4
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# TABLE E-IV

## NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 44, 110 KT. FLY BY, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	65.9	77.1	86.0	82.6	82.6	16.7	11.2
3	65.0	75.2	85.2	81.8	81.8	16.8	11.2
5	67.8	77.7	86.2	83.5	83.5	15.7	9.9
7	71.6	81.7	89.7	86.7	86.7	15.1	10.1
9	75.8	85.2	92.6	90.0	90.0	14.2	9.4
11	78.1	87.0	93.8	92.0	92.0	13.9	8.9
13	78.7	87.9	94.5	92.8	92.8	14.1	9.2
15	78.1	87.2	94.3	92.9	92.9	14.8	9.1
17	78.6	87.1	93.9	93.0	93.0	14.4	8.5
19	78.4	87.1	93.9	93.0	93.0	14.6	8.7
21	77.0	86.2	93.4	91.9	91.9	14.9	9.2
23	78.2	86.9	94.6	93.4	95.0	15.2	8.7
25	79.5	87.2	94.7	94.0	95.5	14.5	7.7
27	79.9	86.9	94.5	94.0	95.2	14.1	7.0
29	79.0	85.0	94.3	93.5	94.7	14.5	7.0
31	79.9	86.3	94.8	94.3	94.3	14.4	6.4
33	80.2	85.6	93.7	93.5	93.5	13.3	5.4
34	81.2	86.2	93.1	94.0	95.9	12.8	5.0
36	81.2	86.1	91.4	93.6	94.6	12.4	4.9
38	80.0	84.9	90.0	92.1	93.3	12.1	4.9
OH --> 40	79.4	84.2	89.4	91.4	91.4	12.0	4.8
42	78.7	83.7	89.2	91.0	91.0	12.3	5.0
44	77.1	82.2	88.3	89.4	89.4	12.3	5.1
46	76.1	81.2	86.6	87.8	89.1	11.7	5.1
48	74.7	79.5	84.6	86.6	87.8	11.9	4.8
50	73.4	78.5	83.3	86.2	87.2	12.8	5.1
52	72.4	77.2	81.9	84.9	86.6	12.5	4.8
54	69.7	74.9	80.5	82.6	83.7	12.9	5.2
56	69.1	74.4	79.0	81.6	83.3	12.5	5.3
58	67.3	72.5	78.2	80.4	82.9	13.1	5.2
60	64.4	70.3	77.1	77.2	78.7	12.8	5.9

# TABLE E-IV

## NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 45, 110 KT. FLY BY, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DRD	OASPL	PNL	PNLT	PNL-DBA	DRD-DBA
1	61.7	73.6	82.1	83.0	83.0	21.3	11.9
3	62.4	74.6	83.0	83.2	83.2	20.8	12.2
5	63.7	75.1	83.5	83.6	83.6	19.9	11.4
7	65.7	76.5	84.9	84.9	84.9	19.2	10.8
9	69.2	78.5	87.3	87.0	87.0	17.8	9.3
11	71.6	79.9	88.3	88.7	88.7	17.1	8.3
13	73.2	81.3	89.2	89.4	89.4	16.2	8.1
15	74.2	83.4	90.8	90.8	90.8	16.6	9.2
17	76.6	86.1	92.9	92.8	92.8	16.2	9.5
19	76.1	85.1	92.3	92.4	92.4	16.3	9.0
21	74.7	83.3	91.3	91.0	91.0	16.3	8.6
23	75.6	84.0	91.6	91.7	91.7	16.1	8.4
25	75.9	84.5	92.2	92.0	92.0	16.1	8.6
27	76.3	85.3	93.2	92.4	92.4	16.1	9.0
29	77.8	86.5	94.1	93.6	95.2	15.8	8.7
31	76.1	85.8	94.4	93.3	94.7	17.2	9.7
33	75.3	84.8	94.2	92.9	92.9	17.6	9.5
35	78.0	85.5	94.1	93.9	93.9	15.9	7.5
37	79.0	85.5	94.1	93.9	95.3	14.9	6.5
39	78.6	84.2	93.2	92.6	93.6	14.0	5.6
41	79.8	85.0	92.8	92.6	92.6	12.8	5.2
43	80.6	85.3	90.7	93.3	93.3	12.7	4.7
OH → 45	80.0	84.4	87.8	92.4	92.4	12.4	4.4
47	80.0	84.7	87.9	91.8	91.8	11.8	4.7
49	79.2	83.7	87.7	91.1	91.1	11.9	4.5
51	77.9	82.3	86.7	90.1	90.1	12.2	4.4
53	77.2	81.8	86.5	89.9	89.9	12.7	4.6
55	74.5	79.6	85.1	87.5	87.5	13.0	5.1
57	71.8	77.8	83.7	85.8	86.8	14.0	6.0
59	70.2	76.3	82.7	84.6	85.9	14.4	6.1
61	67.7	74.4	81.5	83.4	83.4	15.7	6.7
63	67.7	74.2	80.7	83.1	84.7	15.4	6.5
65	68.8	75.1	79.7	84.2	86.5	15.4	6.3
67	66.4	73.6	79.5	82.6	82.6	16.2	7.2
69	65.6	73.2	78.3	82.5	82.5	16.9	7.6
71	63.9	72.1	77.1	81.9	81.9	18.0	8.2
73	63.4	72.4	76.6	82.0	82.0	18.6	9.0

# TABLE E-V

## NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 24, 6 DEGREE APPROACH, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DRA	DBD	OASPL	PNL	PNLT	PNL-DRA	DBD-DRA
1	62.6	71.8	81.1	79.6	79.6	17.0	9.2
5	65.2	72.7	81.4	80.4	80.4	15.2	7.5
9	63.8	73.1	81.8	80.4	80.4	16.6	9.3
13	67.2	76.4	84.9	83.5	83.5	16.3	9.2
17	71.3	79.2	86.0	86.1	86.1	14.8	7.9
21	74.0	80.1	85.6	87.4	87.4	13.4	6.1
25	69.8	76.7	83.7	84.0	84.0	14.2	6.9
29	66.3	73.9	82.3	81.7	81.7	15.4	7.6
33	64.3	72.0	80.9	79.3	79.3	15.5	7.7
37	64.0	72.2	81.1	79.5	79.5	15.5	8.2
41	65.9	74.4	82.4	81.5	81.5	15.6	8.5
45	69.5	76.9	84.1	84.1	84.1	14.6	7.4
49	67.2	75.6	83.9	82.6	82.6	15.4	8.4
53	64.1	74.1	83.8	80.8	80.8	16.7	10.0
57	70.3	79.4	87.1	86.4	86.4	16.1	9.1
61	70.6	80.2	88.1	87.1	87.1	16.5	9.6
65	69.0	77.6	86.4	85.0	85.0	16.0	8.6
69	65.8	74.4	84.1	82.3	82.3	16.5	8.6
73	63.9	71.9	82.5	80.2	80.2	16.3	8.0
77	66.0	73.8	83.8	82.0	82.0	16.0	7.8
81	65.7	74.8	85.1	82.5	82.5	16.8	9.1
85	67.6	76.1	86.5	83.8	83.8	16.2	8.5
89	71.3	78.3	87.3	85.7	87.2	14.4	7.0
93	72.0	79.1	88.1	86.4	86.4	14.4	7.1
97	73.7	79.2	87.8	87.6	89.1	13.9	5.5
101	77.3	81.3	88.3	89.3	90.6	12.0	4.0
105	76.5	81.2	89.1	89.3	90.7	12.8	4.7
109	78.0	82.5	88.9	90.1	92.4	12.1	4.5
111	79.4	83.9	89.4	91.8	93.5	12.4	4.5
115	78.1	82.8	88.3	90.7	92.6	12.6	4.7
119	76.9	81.9	85.9	90.0	90.0	13.1	5.0
OH-123 → 126	75.5	80.6	85.0	88.8	88.8	13.3	5.1
127	75.7	81.8	86.9	90.1	90.1	14.4	6.1
131	76.3	81.8	85.4	89.6	91.0	13.3	5.5
135	75.0	80.5	84.4	88.5	90.5	13.5	5.5
139	74.3	79.9	83.6	87.8	89.6	13.5	5.6
143	73.3	78.7	82.5	86.2	87.9	12.9	5.4
147	72.4	77.7	81.9	85.8	87.3	13.4	5.3
151	70.8	76.2	80.1	83.9	85.3	13.1	5.4
155	68.2	74.5	79.5	82.0	82.0	13.8	6.3
159	63.3	70.7	77.9	78.2	78.2	14.9	7.4
163	63.7	71.0	77.8	79.0	79.0	15.3	7.3
167	62.5	71.0	77.8	78.3	78.3	15.8	8.5

# TABLE E-V

## NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 35, 110 KT. FLT BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
5	67.7	77.3	85.3	83.7	83.7	16.0	9.6
7	70.8	80.1	87.7	86.2	86.2	15.4	9.3
9	71.5	81.0	88.8	87.4	87.4	15.9	9.5
11	73.9	82.7	89.8	89.3	89.3	15.4	8.8
13	80.2	86.4	91.8	93.0	93.0	12.8	6.2
15	83.3	88.6	93.5	95.4	95.4	12.1	5.3
17	79.3	87.2	93.9	93.8	93.8	14.5	7.9
19	78.8	87.4	94.4	94.2	95.3	15.4	8.6
21	78.1	86.6	94.5	93.7	94.8	15.6	8.5
23	75.7	84.7	93.9	91.3	91.3	15.6	9.0
25	77.7	85.6	94.0	92.7	92.7	15.0	7.9
27	79.3	86.5	94.5	94.3	94.3	15.0	7.2
28	80.5	86.9	95.0	94.9	96.0	14.4	6.4
30	82.0	87.3	94.6	95.6	95.6	13.6	5.3
32	80.6	86.5	92.9	95.0	95.0	14.4	5.9
OH 34 → 35	80.8	86.2	90.9	94.2	95.6	13.4	5.4
36	81.2	86.0	90.3	94.0	94.0	12.8	4.8
38	80.2	85.6	90.3	94.1	94.1	13.9	5.4
40	79.7	84.9	89.9	93.3	93.3	13.6	5.2
42	79.2	84.0	89.1	92.4	92.4	13.2	4.8
44	78.0	82.9	87.7	90.7	90.7	12.7	4.9
46	77.4	82.3	86.7	90.2	91.3	12.8	4.9
48	75.3	80.3	85.8	88.0	89.5	12.7	5.0
50	73.8	78.6	84.5	86.8	88.4	13.0	4.8
52	73.2	78.4	85.1	86.7	88.5	13.5	5.2
54	70.7	76.0	84.1	84.3	85.7	13.6	5.3
56	68.8	74.4	82.7	82.8	84.7	14.0	5.6
58	67.4	73.9	81.4	81.9	84.2	14.5	6.5
60	69.9	76.7	83.1	84.1	85.6	14.2	6.8

# TABLE E-V

## NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 36, 110 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	60.6	69.9	78.7	76.7	76.7	16.1	9.3
3	62.2	72.0	80.8	78.4	78.4	16.2	9.8
5	64.0	74.2	83.6	81.3	81.3	17.3	10.2
7	67.9	78.4	87.2	84.4	84.4	16.5	10.5
9	73.3	83.1	90.7	88.8	88.8	15.5	9.8
11	78.8	86.8	93.1	92.9	92.9	14.1	8.0
13	81.1	88.6	94.7	94.9	94.9	13.8	7.5
15	81.1	89.1	95.2	95.2	95.2	14.1	8.0
17	79.6	88.1	94.8	94.7	94.7	15.1	8.5
19	78.1	87.2	94.5	93.7	93.7	15.6	9.1
21	77.4	86.6	94.3	93.5	94.6	16.1	9.2
23	78.3	86.6	94.4	93.7	94.8	15.4	8.3
25	78.9	85.6	93.8	93.2	94.5	14.3	6.7
27	76.9	83.8	92.9	91.7	93.7	14.8	6.9
29	78.7	84.8	93.1	92.5	93.6	13.8	6.1
31	78.9	84.1	91.4	92.5	92.5	13.6	5.2
33	78.0	83.0	88.7	91.6	93.1	13.6	5.0
35	78.5	82.8	86.5	90.8	92.3	12.3	4.3
37	78.8	83.2	86.7	91.7	91.7	12.9	4.4
39	79.7	84.1	88.1	92.3	92.3	12.6	4.4
OH 41 → 40	79.9	84.2	87.5	92.0	93.2	12.1	4.3
43	78.3	82.8	85.2	90.5	91.5	12.2	4.5
45	76.8	81.2	83.8	88.5	88.5	11.7	4.4
47	75.3	79.3	82.8	86.9	88.7	11.6	4.0
49	73.3	77.4	81.4	85.1	86.2	11.8	4.1
51	71.0	75.5	79.5	83.3	84.7	12.3	4.5
53	68.9	73.5	78.4	81.7	83.1	12.8	4.6
55	67.0	71.9	77.0	80.0	80.0	13.0	4.9
57	65.5	70.6	75.9	78.8	80.7	13.3	5.1



TABLE E-V

## NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 44, 110 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

	INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
	1	61.7	70.5	79.2	77.0	77.0	15.3	8.8
	3	61.7	71.2	80.6	77.8	77.8	16.1	9.5
	5	64.7	74.4	83.0	80.9	80.9	16.2	9.7
	7	68.7	78.4	87.0	85.3	85.3	16.6	9.7
	9	72.9	82.5	90.2	88.9	88.9	16.0	9.6
	11	75.9	85.1	92.2	91.4	91.4	15.5	9.2
	13	78.6	87.4	93.9	93.0	93.0	14.4	8.8
	15	79.9	88.7	95.0	94.4	94.4	14.5	8.8
	16	80.3	89.2	95.3	94.7	94.7	14.4	8.9
	18	79.4	88.3	94.8	94.1	94.1	14.7	8.9
	20	78.2	87.3	94.3	93.5	93.5	15.3	9.1
	22	77.4	86.9	94.3	93.2	93.2	15.8	9.5
	24	76.5	86.2	94.3	92.3	93.3	15.8	9.7
	26	75.4	84.7	93.2	91.7	92.9	16.3	9.3
	28	76.1	84.5	93.2	91.8	91.8	15.7	8.4
	30	78.3	85.4	93.6	92.9	92.9	14.6	7.1
	32	77.8	84.0	92.4	91.8	91.8	14.0	6.2
	34	78.1	83.5	91.3	91.8	93.3	13.7	5.4
	36	79.3	84.1	89.2	92.1	92.1	12.8	4.8
	38	79.9	84.0	86.4	91.9	91.9	12.0	4.1
OH →	40	79.0	83.5	86.9	91.7	92.7	12.7	4.5
	42	78.1	83.0	87.3	90.9	90.9	12.8	4.9
	44	77.9	82.4	85.4	90.2	90.2	12.3	4.5
	46	77.0	81.5	83.7	88.8	88.8	11.8	4.5
	48	75.8	80.4	83.2	88.5	90.3	12.7	4.6
	50	73.7	78.7	81.9	86.2	87.7	12.5	5.0
	52	72.7	77.2	80.8	84.8	86.2	12.1	4.5
	54	68.9	73.6	79.3	81.3	82.5	12.4	4.7
	56	66.6	71.6	77.8	79.4	80.9	12.8	5.0
	58	64.9	69.7	76.3	78.3	80.3	13.4	4.8
	60	64.3	69.3	76.3	77.6	77.6	13.3	5.0

# TABLE - E-V

## NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 45, 110 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	63.7	73.6	81.7	83.3	83.3	19.6	9.9
2	65.2	74.4	82.1	83.7	83.7	18.5	9.2
3	65.7	74.7	82.8	84.1	84.1	18.4	9.0
4	66.6	75.6	84.1	84.6	84.6	18.0	9.0
5	66.8	76.3	85.2	85.6	85.6	18.8	9.5
6	68.3	77.6	86.6	86.4	86.4	18.1	9.3
7	70.4	79.7	88.9	88.3	88.3	17.9	9.3
8	73.9	83.2	91.6	91.3	91.3	17.4	9.3
9	76.3	85.9	93.9	93.5	93.5	17.2	9.6
10	77.4	87.1	95.0	94.6	94.6	17.2	9.7
11	77.2	87.2	95.0	94.6	94.6	17.4	10.0
12	76.0	86.3	94.4	93.6	93.6	17.6	10.3
13	74.7	85.1	93.5	92.7	92.7	18.0	10.4
14	73.8	84.0	92.9	92.0	92.0	18.2	10.2
15	73.7	83.5	92.9	91.7	91.7	18.0	9.8
16	73.8	83.1	92.6	91.9	91.9	18.1	9.3
17	73.0	82.2	91.8	91.2	91.2	18.2	9.2
18	71.8	80.9	90.6	90.1	90.1	18.3	9.1
19	71.9	80.3	90.0	89.5	90.6	17.6	8.4
20	73.7	80.8	89.9	89.8	91.1	16.1	7.1
21	74.2	80.5	89.3	89.7	89.7	15.5	6.3
22	74.1	79.7	88.0	89.1	89.1	15.0	5.6
23	74.2	79.2	86.5	88.5	89.6	14.3	5.0
24	74.9	80.0	85.4	88.7	88.7	13.8	5.1
25	77.0	81.4	85.3	89.9	89.9	12.9	4.4
26	78.5	82.6	85.5	90.8	90.8	12.3	4.1
27	79.0	83.0	85.8	91.3	91.3	12.3	4.0
OH → 28	78.9	83.4	86.2	91.8	91.8	12.9	4.5
29	78.9	83.6	87.0	92.0	92.0	13.1	4.7
30	79.0	83.4	87.1	91.7	91.7	12.7	4.4
31	79.1	83.2	86.8	91.3	91.3	12.2	4.1
32	78.1	82.3	85.5	90.2	90.2	12.1	4.2
33	77.0	81.6	84.2	89.5	89.5	12.5	4.6
34	75.2	80.1	82.8	88.2	88.2	13.0	4.9
35	75.4	80.0	82.1	88.4	88.4	13.0	4.6
36	75.8	80.5	82.1	88.6	88.6	12.8	4.7
37	75.3	80.2	82.0	88.1	89.3	12.8	4.9
38	73.9	79.3	81.5	87.3	88.9	13.4	5.4
39	72.9	78.0	80.5	86.6	88.3	13.7	5.1
40	72.3	77.3	79.5	86.1	87.7	13.8	5.0
41	71.3	76.4	79.1	85.1	86.4	13.8	5.1
42	69.3	74.8	78.8	83.8	85.2	14.5	5.5
43	67.9	73.6	78.6	83.1	84.3	15.2	5.7
44	67.4	73.3	78.3	82.9	84.2	15.5	5.9

## TABLE E-V

## NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 24, 6 DEGREE APPROACH, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	D9A	DBD	OASPL	PNL	PNLT	PNL-D9A	DBD-D9A
1	70.5	79.4	85.5	84.7	84.7	14.2	8.9
3	70.4	79.5	85.4	84.9	84.9	14.5	9.1
5	72.4	80.4	85.8	85.5	85.5	13.1	8.0
7	72.7	80.6	85.9	86.3	88.1	13.6	7.9
9	72.1	80.8	86.9	86.4	87.8	14.3	8.7
11	72.5	80.9	87.0	86.3	87.7	13.8	8.4
13	72.8	81.2	87.3	86.4	87.7	13.6	8.4
15	71.9	81.2	87.3	86.0	86.0	14.1	9.3
17	73.8	82.2	87.9	87.7	87.7	13.9	8.4
19	76.0	83.7	87.8	89.3	90.3	13.3	7.7
21	75.7	83.9	88.6	89.1	89.1	13.4	8.2
23	75.2	82.8	88.5	88.3	88.3	13.1	7.6
25	78.0	85.1	88.9	91.4	91.4	13.4	7.1
27	78.1	84.7	88.6	91.0	91.0	12.9	6.6
29	73.6	81.4	87.7	87.5	87.5	13.9	7.8
31	71.0	79.8	87.3	85.8	85.8	14.8	8.8
33	72.8	81.1	88.4	87.0	87.0	14.2	8.3
35	77.5	84.8	89.9	90.8	91.9	13.3	7.3
37	77.9	85.2	90.7	91.3	92.8	13.4	7.3
39	78.1	85.4	90.7	91.7	91.7	13.6	7.3
41	78.3	85.9	90.9	91.7	92.5	13.4	7.6
43	78.9	86.4	91.0	92.1	93.6	13.2	7.5
45	80.3	87.4	91.2	92.8	94.0	12.5	7.1
47	80.5	87.7	91.9	94.0	94.0	13.5	7.2
49	81.9	88.9	92.3	95.2	95.2	13.3	7.0
51	82.1	90.2	93.2	95.9	95.9	13.8	8.1
53	82.7	90.7	93.8	96.3	96.3	13.6	8.0
55	83.6	91.8	94.3	97.5	97.5	13.9	8.2
57	82.4	90.7	93.8	96.7	96.7	14.3	8.3
59	83.7	91.8	94.3	97.4	97.4	13.7	8.1
60	84.2	92.3	95.0	98.0	98.0	13.8	8.1
OH 62 → 63	82.6	91.1	94.8	97.4	97.4	14.8	8.5
64	81.1	89.6	94.2	95.5	95.5	14.4	8.5
66	81.0	90.0	94.4	95.6	95.6	14.6	9.0
68	81.0	90.1	94.1	95.8	95.8	14.8	9.1
70	80.3	89.4	93.5	95.4	95.4	15.1	9.1
72	79.6	88.3	92.1	94.3	94.3	14.7	8.7
74	79.4	88.1	91.7	94.0	94.0	14.6	8.7
76	78.0	86.5	90.1	92.9	92.9	14.9	8.5
78	77.6	85.6	88.9	91.8	91.8	14.2	8.0
80	77.1	84.8	88.1	90.6	90.6	13.5	7.7
82	75.2	82.9	87.2	88.2	90.0	13.0	7.7
84	72.2	80.2	85.5	85.4	86.5	13.2	8.0
86	70.3	78.3	84.4	83.9	85.2	13.6	8.0

TABLE E-V

## NOISE LEVEL TIME HISTORY DATA

HELL 212

OCTOBER 6, 1976

EVENT 27, 9 DEGREE APPROACH, CENTERLINE MIC. ( SOFT SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	70.3	78.8	84.9	84.8	86.0	14.5	8.5
3	74.5	81.1	85.6	87.2	88.5	12.7	6.6
5	74.2	81.6	86.0	88.0	89.1	13.8	7.4
7	76.2	83.0	86.9	89.4	89.4	13.2	6.8
9	75.4	82.4	86.9	88.8	88.8	13.4	7.0
11	74.4	81.7	87.0	87.8	87.8	13.4	7.3
13	74.8	82.2	87.2	88.1	90.0	13.3	7.4
15	76.4	83.1	87.7	89.4	91.7	13.0	6.7
17	77.8	85.0	88.2	90.7	92.9	12.9	7.2
19	78.2	85.1	88.5	91.4	93.2	12.2	6.9
21	78.7	85.7	89.0	91.1	92.5	12.4	7.0
23	78.6	86.1	89.7	91.3	92.8	12.7	7.5
25	79.9	87.2	90.4	92.7	92.7	12.8	7.3
27	82.8	89.5	91.3	94.3	94.3	11.5	6.7
29	80.9	88.3	90.9	93.2	94.6	12.3	7.4
31	82.2	89.6	91.5	94.2	94.2	12.0	7.4
33	82.6	90.0	92.0	94.8	94.8	12.2	7.4
35	82.3	90.1	92.3	94.8	95.8	12.5	7.8
37	83.2	91.2	92.9	96.3	97.5	13.1	8.0
39	83.4	90.8	92.9	96.2	96.2	12.8	7.4
41	83.8	91.3	93.7	97.0	97.0	13.2	7.5
43	84.9	93.0	95.0	98.5	98.5	13.6	8.1
45	84.7	92.8	95.0	98.1	98.1	13.4	8.1
47	85.2	93.4	95.5	99.1	99.1	13.9	8.2
48	85.1	93.4	95.8	99.3	99.3	14.2	8.3
50	83.3	92.0	95.4	98.0	98.0	14.7	8.7
OH-52-53	81.5	90.2	94.3	96.3	96.3	14.8	8.7
54	81.7	90.2	94.6	96.4	96.4	14.7	8.5
56	81.8	90.3	94.9	96.4	96.4	14.6	8.5
58	81.6	90.3	94.6	96.1	96.1	14.5	8.7
60	82.0	90.8	94.5	96.5	96.5	14.5	8.8
62	81.8	90.7	94.0	96.5	96.5	14.7	8.9
64	80.9	89.4	92.3	95.6	95.6	14.7	8.5
66	81.2	89.2	91.2	94.5	94.5	13.3	8.0
68	80.6	88.5	90.5	93.6	93.6	13.0	7.9
70	77.1	85.4	88.5	91.0	91.0	13.9	8.3
72	76.1	84.3	87.3	89.4	91.2	13.3	8.2
74	74.9	82.3	85.6	88.0	89.5	13.1	7.4
76	76.4	83.4	85.3	89.2	90.7	12.8	7.0
78	70.8	78.3	83.4	84.2	84.2	13.4	7.5
80	70.1	78.0	82.2	83.3	83.3	13.2	7.9
82	69.0	77.5	81.9	83.2	84.3	14.2	8.5
84	66.8	76.0	81.2	81.6	82.6	14.8	9.2

**TABLE E-V**  
**NOISE LEVEL TIME HISTORY DATA**  
**BELL 212**

OCTOBER 6, 1976

EVENT 29, 60 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
 (DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLI	PNL-DBA	DBD-DBA
1	63.0	72.7	78.7	79.3	79.3	16.3	9.7
5	65.3	75.3	80.5	80.8	80.8	15.5	10.0
9	67.7	77.1	82.5	82.5	82.5	14.8	9.4
13	68.9	78.2	83.5	83.4	83.4	14.5	9.3
17	69.2	79.2	84.0	84.8	84.8	15.6	10.0
21	67.1	77.4	82.7	82.9	82.9	15.8	10.3
25	65.9	76.0	82.2	81.7	81.7	15.8	10.1
29	68.6	76.5	81.7	82.5	82.5	13.9	7.9
33	68.5	77.1	81.8	82.6	82.6	14.1	8.6
37	67.2	76.3	82.2	82.1	82.1	14.9	9.1
41	67.1	77.5	83.4	82.8	82.8	15.7	10.4
45	69.1	79.4	84.8	84.5	84.5	15.4	10.3
49	68.4	79.2	85.2	84.2	84.2	15.8	10.8
53	67.7	79.0	85.3	83.6	83.6	15.9	11.3
57	68.8	79.5	86.0	84.3	85.5	15.5	10.7
61	71.3	82.7	88.3	87.1	87.1	15.8	11.4
65	68.8	79.6	85.9	84.8	84.8	16.0	10.8
69	70.3	80.8	86.9	86.3	86.3	16.0	10.5
73	68.3	79.6	86.5	84.6	84.6	16.3	11.3
77	69.3	78.9	86.0	84.6	85.7	15.3	9.6
81	71.4	80.7	87.8	86.1	87.7	14.7	9.3
85	76.8	84.5	90.0	90.7	90.7	13.9	7.7
89	76.7	84.2	90.0	90.7	92.1	14.0	7.5
93	76.3	83.9	89.8	90.1	90.1	13.8	7.6
97	76.8	84.6	90.4	90.7	92.0	13.9	7.8
101	77.3	85.5	90.6	92.1	92.1	14.8	8.2
104	78.9	87.0	91.4	93.3	93.3	14.4	8.1
108	78.7	87.0	91.3	92.8	92.8	14.1	8.3
OH 112 → 114	78.2	86.1	90.5	92.1	92.1	13.9	7.9
116	77.2	84.4	89.5	90.9	90.9	13.7	7.2
120	75.7	83.4	87.7	89.5	89.5	13.8	7.7
124	74.0	82.0	85.8	88.1	88.1	14.1	8.0
128	73.9	81.5	84.5	87.3	88.7	13.4	7.6
132	72.5	80.5	83.8	86.2	87.8	13.7	8.0
136	69.7	77.6	82.5	83.8	83.8	14.1	7.9
140	68.3	76.4	81.3	82.2	83.8	13.9	8.1
144	67.4	75.9	80.1	82.1	82.1	14.7	8.5
148	66.4	74.4	79.0	80.2	81.9	13.8	8.0
152	66.7	74.6	78.7	80.9	83.0	14.2	7.9
156	64.0	72.6	77.9	78.5	80.2	14.5	8.6
160	60.8	70.2	76.3	76.5	78.0	15.7	9.4
164	58.0	69.3	76.1	76.0	76.0	18.0	11.3

# TABLE E-V

## NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 30, 60 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	61.5	72.5	80.0	78.4	78.4	16.9	11.0
4	63.0	74.0	81.1	79.5	79.5	16.5	11.0
7	63.2	74.9	81.9	80.3	80.3	17.1	11.7
10	66.7	78.4	84.8	83.2	83.2	16.5	11.7
13	66.3	78.8	85.3	83.2	83.2	16.9	12.5
16	65.5	77.4	84.6	82.3	82.3	16.8	11.9
19	67.2	78.2	84.9	83.1	83.1	15.9	11.0
22	72.3	80.1	85.8	85.7	85.7	13.4	7.8
25	74.1	81.4	86.6	87.0	88.0	12.9	7.3
28	72.7	81.5	87.4	86.7	86.7	14.0	8.8
31	71.1	80.0	86.9	85.7	85.7	14.6	8.9
34	73.6	81.1	87.0	87.3	87.3	13.7	7.5
37	76.1	83.1	88.0	89.3	91.1	13.2	7.0
40	76.5	83.8	88.5	90.6	90.6	14.1	7.3
43	74.7	83.0	89.2	88.9	90.5	14.2	8.3
46	76.5	84.4	89.9	90.4	90.4	13.9	7.9
49	78.7	86.5	91.0	92.9	92.9	14.2	7.8
50	79.3	87.0	91.0	93.0	93.0	13.7	7.7
53	77.9	85.3	89.9	91.4	91.4	13.5	7.4
OH → 56	77.2	84.8	89.1	90.7	90.7	13.5	7.6
59	75.5	82.4	88.0	88.6	88.6	13.1	6.9
62	75.4	82.9	86.4	89.2	89.2	13.8	7.5
65	73.4	81.2	83.8	86.8	88.4	13.4	7.8
68	72.6	80.0	81.8	86.0	88.5	13.4	7.4
71	68.3	76.2	79.4	81.7	83.3	13.4	7.9
74	67.3	75.0	78.3	81.7	84.5	14.4	7.7
77	63.8	72.0	77.5	79.0	81.7	15.2	8.2
80	64.7	72.6	76.7	79.5	82.5	14.8	7.9
83	62.9	71.3	75.7	78.3	81.0	15.4	8.4
86	64.8	72.8	75.8	79.4	82.3	14.6	8.0
89	69.8	77.0	75.8	83.3	86.5	13.5	7.2
92	68.3	76.5	75.9	82.0	84.9	13.7	8.2
95	65.3	74.2	74.9	80.4	83.6	15.1	8.9
98	65.3	74.3	74.8	80.5	83.2	15.2	9.0
101	64.1	73.4	75.0	79.7	82.0	15.6	9.3

# TABLE E-V

## NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1975

EVENT 31, 60 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLI	PNL-DBA	DBD-DBA
1	60.0	70.7	79.4	76.6	76.6	16.6	10.7
4	61.3	72.9	81.0	78.3	78.3	17.0	11.6
7	63.9	75.6	82.8	80.7	80.7	16.8	11.7
10	66.7	77.6	84.1	82.8	82.8	16.1	10.9
13	69.2	79.2	84.8	84.3	84.3	15.1	10.0
16	68.6	78.4	84.1	84.0	84.0	15.4	9.8
19	67.9	78.2	83.8	83.6	83.6	15.7	10.3
22	68.4	79.1	84.6	84.3	84.3	15.9	10.7
25	68.4	79.4	85.2	84.4	84.4	16.0	11.0
28	67.3	78.3	84.3	83.5	83.5	16.2	11.0
31	65.2	76.6	83.7	81.6	81.6	16.4	11.4
34	66.8	77.8	84.5	82.8	82.8	16.0	11.0
37	68.0	78.4	84.8	83.8	83.8	15.8	10.4
40	68.2	78.3	84.9	83.9	83.9	15.7	10.1
43	67.3	78.2	85.4	83.3	83.3	16.0	10.9
46	68.8	79.4	86.1	84.2	84.2	15.4	10.6
49	69.8	79.7	86.4	85.5	85.5	15.7	9.9
52	69.5	79.5	86.1	84.7	86.6	15.2	10.0
55	68.5	79.2	86.2	84.3	85.6	15.8	10.7
58	75.0	82.2	87.4	88.0	88.0	13.0	7.2
61	73.3	81.6	87.6	87.2	89.1	13.9	8.3
64	77.1	83.6	88.6	90.0	92.2	12.9	6.5
67	77.8	85.8	90.0	91.7	91.7	13.9	8.0
70	77.7	84.9	90.0	91.6	91.6	13.9	7.2
73	74.2	82.0	89.1	88.0	89.4	13.8	7.8
76	77.3	84.9	90.4	90.8	92.2	13.5	7.6
79	78.1	85.3	90.3	91.2	91.2	13.1	7.2
82	77.1	85.3	90.2	91.3	91.3	14.2	8.2
85	78.2	86.2	90.1	91.9	91.9	13.7	8.0
88	78.5	85.8	90.2	91.7	91.7	13.2	7.3
91	78.2	86.2	90.7	92.4	92.4	13.6	7.4
OH 92 → 94	78.7	86.2	90.9	92.7	92.7	14.0	7.5
95	77.0	84.1	90.1	90.4	90.4	13.4	7.1
98	75.3	83.0	88.4	89.2	89.2	13.9	7.7
101	74.9	82.7	86.7	88.7	88.7	13.8	7.8
104	75.1	82.7	86.7	88.5	88.5	13.4	7.6
107	73.6	81.2	84.9	87.3	87.3	13.7	7.6
110	73.9	81.3	84.0	87.0	88.3	13.1	7.4
113	72.7	80.3	83.0	85.6	87.1	12.9	7.6
116	69.8	78.0	82.0	83.3	84.4	13.5	8.2
119	68.3	76.2	81.0	81.9	83.4	13.6	7.9
122	69.6	77.0	79.8	83.0	85.0	13.4	7.4
125	62.1	71.0	78.1	76.8	77.9	14.7	8.9

# TABLE E-V

## NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 32, 99 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	68.4	79.9	85.7	83.8	83.8	15.4	11.5
3	76.7	87.4	91.6	91.0	91.0	14.3	10.7
5	77.3	88.2	92.6	91.8	91.8	14.5	10.9
7	76.1	87.5	92.8	91.4	91.4	15.3	11.4
9	72.7	85.4	91.9	89.3	89.3	16.6	12.7
11	71.3	83.3	90.4	87.7	87.7	16.4	12.0
13	73.7	84.8	90.7	88.6	88.6	14.9	11.1
15	75.3	86.4	91.6	90.3	90.3	15.0	11.1
17	74.3	85.9	91.4	90.1	90.1	15.8	11.6
19	74.8	86.4	92.0	90.5	91.8	15.7	11.6
21	75.0	86.5	92.5	91.1	91.1	16.1	11.5
23	74.6	86.3	92.9	91.1	93.0	16.5	11.7
25	75.0	85.9	92.9	90.9	92.5	15.9	10.9
27	78.9	87.3	93.1	93.0	93.0	14.1	8.4
29	80.5	88.4	93.2	94.3	94.3	13.8	7.9
31	81.9	89.1	93.1	94.9	95.9	13.0	7.2
33	82.6	89.8	92.9	95.9	95.9	13.3	7.2
35	83.7	90.8	92.9	97.2	97.2	13.5	7.1
37	82.6	89.8	91.5	96.0	96.0	13.4	7.2
OH→39	79.7	87.7	90.6	93.6	93.6	13.9	8.0
41	77.6	85.6	89.9	92.1	92.1	14.5	8.0
43	75.8	83.5	88.3	90.0	90.0	14.2	7.7
45	75.3	82.6	86.8	88.6	88.6	13.3	7.3
47	75.5	82.4	85.4	88.9	90.8	13.4	6.9
49	74.3	81.5	84.1	88.0	90.5	13.7	7.2
51	73.0	80.1	83.0	86.6	89.3	13.6	7.1
53	70.5	77.9	82.3	84.2	86.9	13.7	7.4
55	69.3	77.0	81.2	83.1	85.4	13.8	7.7
57	69.8	77.1	79.9	83.3	85.8	13.5	7.3
59	65.7	73.2	78.2	79.7	81.8	14.0	7.5



# TABLE E-V

## NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 33, 99 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLI	PNL-DBA	DBD-DBA
3	63.7	74.2	83.0	80.6	80.6	16.9	10.5
5	67.1	77.0	85.2	83.6	83.6	16.5	9.9
7	69.3	78.7	86.6	85.4	85.4	16.1	9.4
9	70.5	80.6	88.2	86.8	86.8	16.3	10.1
11	74.1	84.2	91.2	90.2	90.2	16.1	10.1
13	78.3	87.6	93.6	93.1	93.1	14.8	9.3
15	80.4	89.1	94.6	94.7	94.7	14.3	8.7
17	79.9	88.6	94.4	94.4	94.4	14.5	8.7
19	76.5	86.0	92.9	91.6	91.6	15.1	9.5
21	72.7	82.6	90.5	88.6	88.6	15.9	9.9
23	72.8	82.4	90.0	88.1	88.1	15.3	9.6
25	73.7	83.5	91.0	89.6	89.6	15.9	9.8
27	75.6	84.8	92.2	91.4	91.4	15.8	9.2
29	77.3	85.2	92.6	92.3	92.3	15.0	7.9
31	76.3	84.4	92.3	91.5	92.6	15.2	8.1
33	72.2	82.2	91.1	88.3	88.8	16.6	10.0
35	73.5	81.7	90.3	88.9	90.3	15.4	8.2
37	77.5	84.0	91.6	91.4	91.4	13.9	6.5
39	78.0	84.4	92.1	91.9	92.9	13.9	6.4
41	78.6	85.0	91.9	92.7	92.7	14.1	6.4
43	80.7	87.0	92.0	94.9	94.9	14.2	6.3
44	81.2	87.3	91.8	95.5	95.5	14.3	6.1
OH 46 → 47	79.8	86.0	90.6	94.2	94.2	14.4	6.2
48	78.4	85.0	89.8	92.7	92.7	14.3	6.6
50	77.2	83.3	89.7	91.7	91.7	14.5	6.1
52	75.3	81.2	88.1	89.2	89.2	13.9	5.9
54	74.1	80.1	86.2	87.6	88.6	13.5	6.0
56	73.9	79.6	84.7	87.6	89.7	13.7	5.7
58	73.2	79.0	84.1	87.3	90.2	14.1	5.8
60	72.8	78.8	83.7	87.0	89.7	14.2	6.0
62	71.5	77.3	82.5	85.3	87.8	13.8	5.8
64	67.6	73.8	80.6	81.7	84.2	14.1	6.2
66	66.0	72.9	79.7	80.5	82.8	14.5	6.9
68	68.5	74.4	79.1	82.8	86.1	14.3	5.9
70	65.4	71.4	77.9	79.9	82.8	14.5	6.0
72	62.9	69.6	77.7	77.4	79.2	14.5	6.7
74	64.8	70.6	76.4	79.4	82.6	14.6	5.8
76	63.7	69.7	75.0	78.5	82.1	14.8	6.0

# TABLE E-V

## NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 34, 99 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	63.9	73.3	81.4	80.5	80.5	16.6	9.4
3	62.9	73.3	82.5	80.3	80.3	17.4	10.4
5	64.4	75.6	84.5	81.9	81.9	17.5	11.2
7	68.2	79.1	87.3	85.1	85.1	16.9	10.9
9	71.5	82.0	89.6	87.8	87.8	16.3	10.5
11	74.3	83.9	91.0	89.8	89.8	15.5	9.6
13	77.6	86.2	92.6	92.0	92.0	14.4	8.6
15	80.1	88.8	94.7	94.5	94.5	14.4	8.7
17	78.4	87.9	94.6	93.6	94.7	15.2	9.5
19	74.3	84.2	92.2	90.1	90.1	15.8	9.9
21	73.8	83.4	91.1	89.3	89.3	15.5	9.6
23	73.8	83.7	91.0	89.6	89.6	15.8	9.9
25	73.9	83.8	91.8	90.1	90.1	16.2	9.9
27	73.5	84.2	92.5	90.0	91.0	16.5	10.7
29	74.6	84.6	93.0	91.0	91.0	16.4	10.0
31	74.9	84.5	93.1	91.4	91.4	16.5	9.6
33	75.0	83.6	92.8	90.6	92.0	15.6	8.6
35	76.9	84.5	93.0	91.4	91.4	14.5	7.6
37	78.4	85.2	93.2	92.6	93.8	14.2	6.8
39	79.6	86.1	93.2	94.0	94.0	14.4	6.5
41	80.5	86.7	92.3	95.0	95.0	14.5	6.2
43	81.5	87.4	91.3	95.4	95.4	13.9	5.9
OH → 45	80.9	86.6	90.7	94.3	94.3	13.4	5.7
47	77.8	83.9	89.6	92.1	92.1	14.3	6.1
49	76.8	82.5	88.2	90.4	90.4	13.6	5.7
51	76.3	82.0	86.9	89.6	90.8	13.3	5.7
53	75.6	81.3	86.1	89.3	91.7	13.7	5.7
55	74.6	80.4	84.5	88.6	91.8	14.0	5.8
57	71.7	77.7	81.9	85.9	88.8	14.2	6.0
59	69.6	75.7	81.8	83.9	86.1	14.3	6.1
61	68.8	74.6	80.9	82.8	85.3	14.0	5.8
63	66.0	71.9	80.0	80.4	82.9	14.4	5.9
65	64.6	70.6	78.8	78.4	80.2	13.8	6.0
67	60.3	68.0	77.2	75.7	78.1	15.4	7.7

# TABLE E-IV

## NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 35, 110 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLI	PNL-DBA	DBD-DBA
1	66.5	76.0	83.7	82.4	82.4	15.9	9.5
3	66.5	76.0	84.1	82.6	82.6	16.1	9.5
5	67.4	77.0	85.2	83.4	83.4	16.0	9.6
7	72.2	81.7	88.8	87.6	87.6	15.4	9.5
9	77.0	85.9	92.1	91.4	91.4	14.4	8.9
11	80.4	89.0	94.5	94.2	94.2	13.8	8.6
13	81.4	89.8	95.6	95.8	95.8	14.4	8.4
15	79.9	89.0	95.5	95.0	95.0	15.1	9.1
17	78.4	87.8	95.1	93.9	93.9	15.5	9.4
19	79.5	88.4	95.2	94.4	94.4	14.9	8.9
21	79.4	88.3	94.6	94.2	94.2	14.8	8.9
23	77.9	86.8	93.8	93.0	93.0	15.1	8.9
25	78.2	87.0	94.0	93.2	93.2	15.0	8.8
27	76.3	86.0	94.0	92.2	92.2	15.9	9.7
29	76.2	85.9	94.2	92.2	92.2	16.0	9.7
31	78.2	86.7	94.7	93.3	94.6	15.1	8.5
33	80.2	87.2	94.9	94.2	95.4	14.0	7.0
35	82.3	88.9	95.7	96.0	96.0	13.7	6.6
37	83.3	89.6	95.4	97.4	97.4	14.1	6.3
39	83.5	89.3	94.0	97.6	97.6	14.1	5.8
40	83.9	89.5	93.3	97.9	97.9	14.0	5.6
OH 42 → 43	83.2	88.9	92.2	97.0	97.0	13.8	5.7
44	80.2	86.4	91.2	94.4	94.4	14.2	6.2
46	77.8	83.8	90.0	91.8	91.8	14.0	6.0
48	78.4	84.2	90.0	92.1	93.4	13.7	5.8
50	77.4	83.2	88.4	91.4	93.3	14.0	5.6
52	74.7	80.4	85.9	88.5	90.5	13.8	5.7
54	73.3	79.2	85.2	87.1	89.2	13.8	5.9
56	73.0	79.1	85.7	87.3	89.5	14.3	6.1
58	70.6	76.9	83.8	85.2	87.9	14.6	6.3
60	69.9	77.7	85.7	85.1	87.6	15.2	7.8
62	69.5	78.6	87.0	86.5	88.7	17.0	9.1
64	69.1	77.8	85.8	85.3	87.9	16.2	8.7
66	66.2	73.7	81.2	80.8	83.3	14.6	7.5
68	67.0	73.6	80.6	81.3	83.2	14.3	6.6
70	65.7	73.4	81.4	80.8	82.0	15.1	7.7

# TABLE-E-V

## NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 36, 110 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	68.9	78.1	84.9	84.7	84.7	15.8	9.2
3	69.8	79.3	86.7	85.8	85.8	16.0	9.5
5	70.0	80.2	88.0	86.3	86.3	16.3	10.2
7	74.2	83.8	90.8	89.6	89.6	15.4	9.6
9	78.9	87.6	93.5	93.2	93.2	14.3	8.7
11	80.0	88.3	93.8	94.2	94.2	14.2	8.3
13	77.6	86.4	92.7	92.1	92.1	14.5	8.8
15	76.6	85.6	92.0	91.2	91.2	14.6	9.0
17	77.1	86.2	92.6	91.7	91.7	14.6	9.1
19	76.5	86.1	93.0	91.8	91.8	15.3	9.6
21	78.7	88.1	94.4	93.5	93.5	14.8	9.4
23	78.4	87.8	94.5	93.6	93.6	15.2	9.4
25	78.2	87.2	94.3	93.8	95.1	15.6	9.0
27	79.0	88.2	95.1	94.5	96.4	15.5	9.2
29	78.9	87.9	95.2	94.8	94.8	15.9	9.0
31	79.5	87.5	95.5	94.7	94.7	15.2	8.0
33	80.1	87.4	95.3	94.8	95.9	14.7	7.3
35	82.1	88.4	95.4	95.8	95.8	13.7	6.3
37	85.6	91.4	96.1	99.5	99.5	13.9	5.8
38	86.0	91.8	95.7	99.9	99.9	13.9	5.8
40	84.1	89.9	92.9	98.0	98.0	13.9	5.8
OH → 42	81.9	88.0	90.9	95.4	95.4	13.5	6.1
44	79.2	85.2	88.8	93.4	93.4	14.2	6.0
46	77.9	83.3	86.3	91.0	91.0	13.1	5.4
48	77.1	82.2	86.1	90.4	92.3	13.3	5.1
50	75.9	81.2	85.9	89.1	90.7	13.2	5.3
52	74.5	79.7	84.5	87.7	89.0	13.2	5.2
54	71.6	77.0	81.5	85.3	87.4	13.7	5.4
56	73.3	78.4	80.5	86.2	88.3	12.9	5.1
58	70.1	75.0	79.0	83.1	84.8	13.0	4.9

# TABLE E-V

## NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 37, 114 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DED	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	68.1	77.1	84.7	84.0	84.0	15.9	9.0
2	69.7	79.3	86.7	85.8	85.8	16.1	9.6
3	72.4	81.7	88.6	87.9	87.9	15.5	9.3
4	74.6	83.8	90.4	90.4	91.8	15.8	9.2
5	77.0	85.7	92.0	92.2	92.2	15.2	8.7
6	78.7	86.7	93.2	93.3	93.3	14.6	8.0
7	81.2	88.4	94.6	94.8	94.8	13.6	7.2
8	82.4	89.7	95.7	96.3	96.3	13.9	7.3
9	83.3	90.9	96.5	97.3	97.3	14.0	7.6
10	82.8	91.1	96.9	97.2	97.2	14.4	8.3
11	82.0	90.5	96.4	96.4	96.4	14.4	8.5
12	81.4	89.8	95.9	95.6	95.6	14.2	8.4
13	81.9	90.1	95.3	96.0	96.0	14.1	8.2
14	82.5	90.5	95.6	96.5	96.5	14.0	8.0
15	83.0	91.2	96.2	97.0	97.0	14.0	8.2
16	82.7	91.1	96.6	96.9	96.9	14.2	8.4
17	82.5	91.3	97.1	96.9	96.9	14.4	8.8
18	81.9	90.6	97.0	96.9	96.9	15.0	8.7
19	82.0	90.3	97.0	96.7	96.7	14.7	8.3
20	81.7	89.9	96.9	96.5	96.5	14.8	8.2
21	81.3	89.5	96.8	96.1	97.2	14.8	8.2
22	81.3	89.3	96.7	96.3	96.3	15.0	8.0
23	82.1	89.3	96.4	96.3	97.4	14.2	7.2
24	83.3	89.9	96.6	97.5	97.5	14.2	6.6
25	83.5	89.9	96.4	97.4	97.4	13.9	6.4
26	84.2	90.3	96.5	97.9	97.9	13.7	6.1
27	84.1	90.2	96.2	97.8	97.8	13.7	6.1
28	84.9	90.9	96.1	98.5	98.5	13.6	6.0
29	84.6	90.9	95.8	98.8	98.8	14.2	6.3
30	85.5	91.7	96.1	100.1	100.1	14.6	6.2
31	85.5	91.7	95.8	100.2	100.2	14.7	6.2
32	84.9	91.1	94.8	99.4	99.4	14.5	6.2
OH → 33	82.9	89.3	92.9	96.7	96.7	13.8	6.4
34	80.6	87.1	91.2	94.8	94.8	14.2	6.5
35	78.8	85.1	89.9	93.1	93.1	14.3	6.3
36	77.7	83.8	88.9	91.8	91.8	14.1	6.1
37	77.1	83.2	88.6	90.9	90.9	13.8	6.1
38	76.6	82.6	88.2	90.3	91.4	13.7	6.0
39	76.1	81.9	87.3	89.8	91.2	13.7	5.8
40	75.4	81.3	86.4	89.5	91.6	14.1	5.9
41	74.9	80.8	85.7	89.1	91.6	14.2	5.9
42	73.7	79.7	84.8	88.0	90.5	14.3	6.0
43	73.0	78.8	83.7	86.9	89.4	13.9	5.8

# TABLE E-II

## NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 38, 114 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
3	71.0	79.0	82.2	87.0	87.0	16.0	8.0
5	72.1	80.7	84.8	88.2	88.2	16.1	8.6
7	73.0	83.0	87.1	90.3	90.3	17.3	10.0
9	81.7	89.6	94.8	96.6	96.6	14.9	7.9
11	85.8	93.7	98.2	99.6	99.6	13.8	7.9
13	84.5	93.5	98.8	99.6	99.6	15.1	9.0
15	85.5	94.1	99.1	100.0	100.0	14.5	8.6
17	85.1	94.0	99.4	100.0	100.0	14.9	8.9
19	83.7	93.1	99.2	99.1	99.1	15.4	9.4
21	84.5	93.9	99.7	100.1	101.1	15.6	9.4
23	86.0	94.7	100.2	101.3	101.3	15.3	8.7
25	85.3	94.3	100.1	100.5	101.6	15.2	9.0
27	82.5	92.3	99.2	98.4	98.4	15.9	9.8
29	81.7	91.3	99.1	98.3	98.3	16.6	9.6
31	83.6	91.8	99.6	98.8	98.8	15.2	8.2
33	85.3	92.1	98.8	99.6	99.6	14.3	6.8
35	85.0	91.4	97.5	99.4	99.4	14.4	6.4
37	85.2	90.9	95.5	99.4	99.4	14.2	5.7
OH → 39	83.5	88.4	92.2	96.6	96.6	13.1	4.9
41	81.2	86.5	89.5	94.6	94.6	13.4	5.3
43	79.0	84.7	87.5	92.4	92.4	13.4	5.7
45	78.1	83.4	85.1	91.8	93.4	13.7	5.3
47	76.2	81.9	83.7	90.3	92.0	14.1	5.7
49	73.7	79.1	82.9	87.9	89.9	14.2	5.4
51	72.5	77.9	80.8	86.7	88.9	14.2	5.4
53	69.7	75.6	78.2	84.4	86.6	14.7	5.9

TABLE E-V

## NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 43, 3 DEGREE APPROACH, CENTERLINE MIC. ( SOFT SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	66.0	73.8	81.7	80.7	80.7	14.7	7.8
4	65.6	73.6	82.1	80.7	80.7	15.1	8.0
7	68.8	76.8	83.6	83.8	83.8	15.0	8.0
10	72.4	80.2	85.4	87.2	87.2	14.8	7.8
13	70.0	78.7	85.1	85.1	85.1	15.1	8.7
16	66.7	76.1	83.9	82.7	82.7	16.0	9.4
19	67.8	76.3	84.2	83.1	83.1	15.3	8.5
22	67.5	76.0	84.2	82.9	82.9	15.4	8.5
25	66.4	75.3	83.8	82.2	82.2	15.8	8.9
28	63.5	72.4	83.0	80.1	80.1	16.6	8.9
31	61.7	71.5	81.7	78.7	78.7	17.0	9.8
34	62.6	71.7	82.0	79.4	79.4	16.8	9.1
37	63.6	72.9	82.6	80.2	80.2	16.6	9.3
40	66.6	74.7	83.0	81.8	81.8	15.2	8.1
43	66.3	74.9	83.3	81.9	83.4	15.6	8.6
46	67.7	75.3	83.8	82.6	84.2	14.9	7.6
49	64.5	73.4	83.2	80.3	80.3	15.8	8.9
52	65.3	74.3	84.1	81.1	81.1	15.8	9.0
55	67.8	77.6	85.9	83.9	83.9	16.1	9.8
58	70.0	79.5	87.4	86.2	86.2	16.2	9.5
61	70.4	79.1	87.4	86.2	86.2	15.8	8.7
64	72.1	79.9	87.6	86.6	88.1	14.5	7.8
67	76.5	81.8	88.6	89.4	90.7	12.9	5.3
70	75.2	81.4	88.8	89.5	90.8	14.3	6.2
73	75.1	81.8	88.9	89.5	90.9	14.4	6.7
76	78.1	83.8	90.3	91.9	91.9	13.8	5.7
79	77.0	82.7	89.9	90.9	92.1	13.9	5.7
82	78.7	85.0	91.1	92.5	92.5	13.8	5.3
85	81.6	87.2	92.0	94.4	94.4	12.8	5.6
88	81.4	87.5	92.4	95.4	95.4	14.0	6.1
91	80.5	87.8	92.8	95.9	95.9	15.4	7.3
94	82.2	88.7	93.6	96.5	96.5	14.3	6.5
97	82.9	88.8	93.8	96.9	96.9	14.0	5.9
OH 100 → 102	80.5	86.4	92.8	93.9	93.9	13.4	5.9
103	79.7	85.9	93.4	93.7	93.7	14.0	6.2
106	78.5	85.1	92.8	93.3	93.3	14.8	6.6
109	76.9	83.7	91.2	91.7	91.7	14.8	6.8
112	78.1	84.6	90.7	92.9	92.9	14.6	6.5
115	76.3	83.0	88.9	90.6	91.7	14.3	6.7
118	75.2	82.0	87.6	89.3	89.3	14.1	6.8
121	74.0	80.4	85.6	87.5	89.2	13.5	6.4
124	69.7	77.0	83.9	84.3	85.4	14.6	7.3
127	69.3	75.8	81.9	83.2	84.6	13.9	6.5
130	64.7	72.0	80.2	79.1	80.9	14.4	7.3

# TABLE E-VI

## NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 44, 110 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	67.1	74.7	80.9	81.8	81.8	14.7	7.6
3	67.4	74.9	81.6	82.2	82.2	14.8	7.5
5	68.0	76.0	83.3	82.8	82.8	14.8	8.0
7	75.3	83.2	88.8	89.6	89.6	14.3	7.9
9	80.4	88.2	93.4	94.0	94.0	13.6	7.8
11	80.8	88.6	94.2	94.8	94.8	14.0	7.8
13	80.6	89.0	94.3	94.9	94.9	14.3	8.4
15	80.1	88.9	94.5	94.2	94.2	14.1	8.8
17	80.4	89.3	95.2	94.7	94.7	14.3	8.9
19	79.3	88.6	95.1	94.5	94.5	15.2	9.3
21	79.0	87.9	94.2	93.8	93.8	14.8	8.9
23	78.1	87.3	93.8	92.9	92.9	14.8	9.2
25	76.9	86.6	93.7	92.5	92.5	15.6	9.7
27	77.6	87.0	94.7	93.1	95.1	15.5	9.4
29	78.3	87.4	95.3	94.0	94.0	15.7	9.1
31	78.5	87.8	95.9	94.1	94.1	15.6	9.3
33	79.5	87.8	95.8	94.6	94.6	15.1	8.3
35	82.8	89.6	96.4	97.0	98.2	14.2	6.8
37	85.5	91.5	96.3	99.5	99.5	14.0	6.0
39	84.9	90.6	94.5	98.9	98.9	14.0	5.7
CH 41 → 42	83.0	88.2	91.2	96.4	96.4	13.4	5.2
43	81.1	86.7	89.3	94.5	94.5	13.4	5.6
45	79.1	84.5	88.4	92.2	92.2	13.1	5.4
47	77.8	82.9	87.3	90.7	90.7	12.9	5.1
49	75.9	81.3	86.3	89.5	91.1	13.6	5.4
51	73.8	79.7	84.9	88.2	90.3	14.4	5.9
53	73.7	79.5	83.4	87.7	90.6	14.0	5.8
55	73.0	78.7	82.1	87.0	90.3	14.0	5.7
57	70.3	75.9	80.4	84.4	87.5	14.1	5.6
59	66.1	72.0	78.8	80.0	81.8	13.9	5.9
61	67.9	73.4	78.3	81.9	85.3	14.0	5.5



# TABLE E-V

## NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 45, 110 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
3	63.4	73.1	80.8	81.5	81.5	18.1	9.7
5	66.1	76.1	83.4	83.6	83.6	17.5	10.0
7	67.5	77.9	85.1	85.4	85.4	17.9	10.4
9	68.7	78.9	86.0	86.3	86.3	17.6	10.2
11	70.2	80.3	87.3	87.4	87.4	17.2	10.1
13	72.1	81.7	88.2	88.7	88.7	16.6	9.6
15	75.3	83.9	89.5	90.5	90.5	15.2	8.6
17	76.5	84.7	89.8	91.5	91.5	15.0	8.2
19	77.2	85.3	90.3	91.9	91.9	14.7	8.1
21	77.2	85.5	90.8	92.4	92.4	15.2	8.3
23	76.9	85.4	91.1	92.1	92.1	15.2	8.5
25	74.8	83.6	90.1	90.8	90.8	16.0	8.8
27	73.9	83.4	90.7	89.8	89.8	15.9	9.5
29	75.3	84.8	92.0	91.0	91.0	15.7	9.5
31	77.7	87.1	93.5	93.3	93.3	15.6	9.4
33	79.5	88.5	94.9	94.6	94.6	15.1	9.0
35	76.6	86.5	94.0	93.0	93.0	16.4	9.9
37	72.9	84.0	93.3	91.1	91.1	18.2	11.1
39	72.7	83.6	93.2	90.9	90.9	18.2	11.1
41	72.6	82.9	92.5	90.2	90.2	17.6	10.3
43	73.8	83.0	93.0	90.6	90.6	16.8	9.2
45	77.4	84.3	92.7	92.5	92.5	15.1	6.9
47	79.3	86.0	91.8	94.2	94.2	14.9	6.7
OH 49 → 50	81.1	87.2	91.2	95.7	95.7	14.6	6.1
51	79.7	85.7	89.0	93.4	93.4	13.7	6.0
53	78.4	84.3	87.6	92.5	92.5	14.1	5.9
55	76.6	82.6	85.5	91.3	90.3	13.7	6.0
57	75.3	80.4	84.1	87.6	87.6	12.3	5.1
59	75.4	80.5	84.5	88.5	90.2	13.1	5.1
61	75.1	80.1	83.8	88.6	90.8	13.5	5.0
63	70.8	76.1	81.5	85.0	87.2	14.2	5.3
65	68.3	74.3	81.2	82.5	84.0	14.2	6.0
67	69.2	75.0	79.9	83.6	85.9	14.4	5.8
69	68.3	73.8	79.0	82.9	85.4	14.6	5.5
71	66.7	72.0	77.7	81.0	83.5	14.3	5.3
73	67.5	72.6	77.7	81.6	83.3	14.1	5.1
75	65.9	71.4	77.3	80.5	81.9	14.6	5.5

# TABLE E-V

## NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 46, 114 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	67.7	77.5	85.6	88.3	88.3	20.6	9.8
2	67.9	78.2	86.6	88.6	88.6	20.7	10.3
3	69.5	79.7	88.1	89.6	89.6	20.1	10.2
4	72.1	81.6	89.9	91.4	91.4	19.3	9.5
5	76.5	84.6	92.2	94.0	94.0	17.5	8.1
6	82.7	90.7	95.9	98.3	98.3	15.6	8.0
7	86.4	93.5	97.9	100.7	100.7	14.3	7.1
8	87.2	94.3	98.8	101.4	101.4	14.2	7.1
9	86.8	94.0	98.7	101.2	101.2	14.4	7.2
10	85.1	93.2	98.4	100.3	100.3	15.2	8.1
11	83.8	92.7	98.2	99.6	99.6	15.8	8.9
12	82.7	91.6	97.5	98.7	98.7	16.0	8.9
13	81.9	90.5	96.9	98.1	98.1	16.2	8.6
14	81.7	89.8	96.5	97.6	97.6	15.9	8.1
15	81.0	89.4	96.4	97.5	97.5	16.5	8.4
16	81.1	89.8	96.7	97.7	98.7	16.6	8.7
17	81.8	90.6	97.4	98.3	99.5	16.5	8.8
18	81.9	90.8	97.7	98.6	98.6	16.7	8.9
19	81.6	90.5	97.9	98.5	98.5	16.9	8.9
20	81.1	90.2	97.9	98.3	98.3	17.2	9.1
21	81.3	90.2	98.2	98.4	98.4	17.1	8.9
22	81.1	90.0	98.2	98.3	98.3	17.2	8.9
23	80.4	89.3	97.8	97.9	97.9	17.5	8.9
24	80.2	89.0	97.6	97.3	98.4	17.1	8.8
25	80.7	89.0	97.3	97.2	97.2	16.5	8.3
26	81.9	89.2	97.0	97.2	97.2	15.3	7.3
27	82.2	88.8	96.5	97.3	97.3	15.1	6.6
28	82.9	88.9	96.2	97.8	97.8	14.9	6.0
29	83.2	88.9	95.5	97.7	97.7	14.5	5.7
30	83.8	89.4	94.8	98.1	98.1	14.3	5.6
31	83.3	89.0	93.8	97.8	97.8	14.5	5.7
32	82.6	88.5	92.7	97.0	97.0	14.4	5.9
OH → 33	81.7	87.5	91.3	95.7	95.7	14.0	5.8
34	81.1	86.7	89.9	94.9	94.9	13.8	5.6
35	80.1	85.6	88.6	94.2	94.2	14.1	5.5
36	78.7	84.1	87.2	92.8	92.8	14.1	5.7
37	77.8	83.4	85.5	91.4	91.4	13.6	5.6
38	77.8	83.0	84.2	91.0	91.0	13.2	5.2
39	77.8	82.6	83.5	91.1	92.3	13.3	4.8
40	77.7	82.6	82.9	91.1	92.6	13.4	4.9
41	77.6	82.4	82.4	91.2	92.9	13.6	4.8
42	76.6	81.6	81.7	90.4	92.1	13.8	5.0
43	75.3	80.2	80.9	89.5	91.3	14.2	4.9
44	74.0	79.2	80.2	88.2	89.4	14.2	5.2

*TABLE E-IV*  
NOISE LEVEL TIME HISTORY DATA  
BELL 212

OCTOBER 6, 1976

EVENT 47, 114 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DRA	DBD-DBA
1	70.3	80.0	87.8	86.5	86.5	16.2	9.7
3	70.6	81.3	89.4	87.2	87.2	16.6	10.7
5	71.4	82.0	89.6	88.0	88.0	16.6	10.6
7	72.2	82.6	89.9	88.3	88.3	16.1	10.4
9	74.6	84.4	91.0	89.8	89.8	15.2	9.8
11	78.0	86.9	92.6	92.6	92.6	14.6	8.9
13	81.1	89.1	94.3	95.0	95.0	13.9	8.0
15	81.5	89.6	94.7	95.4	95.4	13.9	8.1
17	80.6	89.2	94.9	94.8	94.8	14.2	8.6
19	79.1	88.4	94.7	93.8	93.8	14.7	9.3
21	78.2	87.6	94.4	93.3	93.3	15.1	9.4
23	77.6	86.9	93.8	92.8	92.8	15.2	9.3
25	76.8	86.5	93.7	92.0	92.0	15.2	9.7
27	78.9	88.1	94.8	94.0	94.0	15.1	9.2
29	80.6	89.4	96.6	95.6	95.6	15.0	8.8
31	80.2	89.2	96.7	95.5	95.5	15.3	9.0
33	81.0	89.3	97.0	95.8	95.8	14.8	8.3
35	82.2	89.5	97.1	96.7	96.7	14.5	7.3
37	83.3	89.9	96.8	98.0	98.0	14.7	6.6
38	83.6	90.0	96.3	98.3	98.3	14.7	6.4
40	83.0	89.0	93.8	97.4	97.4	14.4	6.0
OH → 42	80.9	86.9	90.6	94.4	94.4	13.5	6.0
44	78.4	84.5	88.3	92.3	92.3	13.9	6.1
46	76.9	82.6	85.7	89.9	89.9	13.0	5.7
48	76.7	81.8	84.6	90.2	92.3	13.5	5.1
50	74.8	80.3	83.3	88.6	91.0	13.8	5.5
52	72.0	77.6	81.6	86.1	88.4	14.1	5.6
54	71.1	77.0	81.0	85.3	87.4	14.2	5.9
56	70.7	76.7	80.5	85.0	87.2	14.3	6.0
58	67.4	74.0	80.3	81.9	83.7	14.5	6.6

# TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 24, 6 DEGREE APPROACH, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-27.5	-22.0	-16.5	-11.0	-5.5	0	3.0	5.5	11.0	13.0
17	77.2	80.2	79.3	76.6	70.9	78.9	84.1	80.8	75.9	75.2
18	77.3	80.7	80.3	77.9	78.3	75.3	82.3	78.3	76.9	74.5
19	73.9	79.1	78.2	74.9	77.9	76.4	71.8	77.2	72.5	70.3
20	72.7	78.3	78.2	69.8	74.3	72.0	73.3	77.6	73.4	72.2
21	71.5	77.0	76.1	70.6	69.0	65.6	69.7	70.0	70.5	69.7
22	67.4	71.1	67.6	62.0	59.1	74.7	75.4	69.7	71.6	70.6
23	67.2	70.9	65.4	57.6	66.7	76.0	79.7	78.1	68.1	69.4
24	67.3	68.9	60.0	61.4	72.6	78.0	80.3	81.9	62.1	65.0
25	64.6	64.8	68.5	65.4	73.0	74.9	79.1	77.7	64.6	62.1
26	63.2	65.5	75.2	69.9	71.3	67.6	71.0	72.6	67.4	65.0
27	63.6	68.0	74.8	69.1	67.1	72.8	74.3	71.0	67.2	66.9
28	64.2	68.5	69.5	62.1	70.4	66.8	69.6	72.1	58.0	62.1
29	60.8	65.1	62.0	64.4	65.6	68.9	71.2	69.0	60.3	54.7
30	55.7	59.5	66.9	60.1	67.2	67.3	66.6	66.2	57.8	58.1
31	57.6	62.8	62.7	63.6	67.1	65.8	65.0	65.7	54.8	55.5
32	55.5	60.6	61.7	62.0	66.2	65.4	64.3	65.2	56.0	57.5
33	49.5	55.2	58.5	60.8	65.0	62.8	63.2	65.2	55.8	55.6
34	47.0	53.0	54.5	56.5	61.3	61.1	60.4	58.8	50.2	50.6
35	45.0	48.9	51.7	52.3	60.0	57.2	57.8	56.6	48.6	48.9
36	45.0	45.4	47.2	48.5	56.3	55.1	57.1	56.6	48.5	47.4
37	45.0	45.0	45.0	45.0	50.8	50.0	50.9	49.7	45.0	45.0
38	45.0	45.0	45.0	45.0	46.7	47.3	49.2	46.5	45.0	45.0
39	45.0	45.0	45.0	45.0	45.3	48.4	50.9	48.9	45.0	45.0
40	45.0	45.0	45.0	45.0	45.0	45.0	45.7	45.0	45.0	45.0
A	69.4	73.9	76.9	72.8	77.1	77.8	80.2	79.4	70.3	70.1
D	76.1	80.3	81.8	78.1	81.7	83.7	86.0	85.1	76.7	76.4
OASPL	83.5	87.0	87.2	85.0	85.4	90.8	91.1	89.0	82.6	81.5
PNL	82.7	87.3	89.2	85.6	89.3	90.9	93.0	93.1	83.9	83.4
PNLT	82.7	87.3	90.7	86.7	90.6	90.9	94.0	93.6	83.9	83.4

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 27, 9 DEGREE APPROACH, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-30.5	-24.5	-18.5	-12.5	-6.5	-.5	0	3.5	5.5	11.5	12.0
17	76.2	77.5	79.1	78.4	75.5	79.1	78.9	82.5	80.5	76.1	76.0
18	76.4	78.1	79.6	79.1	76.7	73.7	74.3	77.5	77.9	75.5	74.7
19	73.8	76.4	77.3	77.3	76.9	75.5	74.9	76.6	73.4	71.0	70.9
20	71.8	73.0	75.4	76.0	71.2	72.4	73.5	78.0	75.4	72.9	72.2
21	71.9	71.2	75.0	74.4	67.6	66.6	67.4	70.0	69.3	72.3	71.6
22	64.9	63.4	67.5	69.4	62.1	73.6	73.6	75.5	64.9	71.3	71.1
23	64.4	60.9	64.8	60.5	72.5	78.3	77.2	81.8	73.9	68.4	67.7
24	61.3	56.8	65.8	70.2	75.0	77.3	76.8	83.5	75.2	62.2	62.5
25	58.3	62.8	73.0	74.4	72.4	76.6	75.3	78.0	75.6	64.2	62.6
26	68.1	70.1	78.1	76.1	69.3	67.2	67.7	70.1	71.6	68.4	66.5
27	69.7	68.4	74.6	72.0	67.1	71.1	71.8	73.9	68.5	69.5	66.8
28	64.7	59.7	67.3	66.8	70.5	66.6	66.6	70.2	70.8	61.4	61.0
29	56.4	51.2	66.6	69.8	65.0	69.2	69.4	71.5	66.0	57.9	54.4
30	50.5	54.3	61.9	63.2	65.3	66.3	66.8	67.5	64.7	60.7	59.1
31	52.9	51.1	61.9	65.2	64.9	64.9	65.2	66.2	63.7	55.8	54.9
32	48.0	52.0	59.1	64.1	63.5	64.5	63.5	63.9	63.5	60.0	60.2
33	46.1	48.2	57.6	62.0	62.3	63.3	62.8	63.7	63.4	57.7	57.7
34	45.0	45.2	55.4	58.0	60.1	61.3	60.9	61.7	58.1	53.6	52.4
35	45.0	45.0	51.6	54.9	58.2	58.8	58.1	59.2	56.6	52.5	51.1
36	45.0	45.0	47.5	50.2	54.9	56.5	55.6	59.1	58.6	51.0	49.7
37	45.0	45.0	45.0	45.8	49.1	50.9	50.7	51.6	50.5	45.0	45.0
38	45.0	45.0	45.0	45.0	45.0	47.4	47.7	49.0	47.6	45.0	45.0
39	45.0	45.0	45.0	45.0	45.0	48.2	48.6	51.8	50.2	45.0	45.0
40	45.0	45.0	45.0	45.0	45.0	45.0	45.2	46.0	45.3	45.0	45.0
A	70.1	69.1	73.0	77.6	75.9	77.9	77.8	80.7	77.0	71.4	70.3
D	75.7	76.1	82.7	82.3	81.3	84.0	83.6	86.8	82.9	77.7	76.7
OASPL	82.4	84.0	86.7	86.7	84.7	90.5	90.9	92.4	87.6	82.6	81.7
PNL	83.3	83.6	90.2	90.1	88.8	90.7	90.4	94.5	90.0	85.2	83.8
PNLT	84.6	84.6	90.2	91.7	90.3	90.7	90.4	95.2	91.6	86.5	85.3

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 36, 110 KT. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-19.5	-16.0	-12.5	-9.0	-5.5	-2.0	0	1.5	5.0	7.5
17	81.2	82.4	85.5	85.9	88.4	86.7	78.3	83.1	81.3	75.2
18	82.3	83.5	86.1	85.8	88.1	85.2	80.6	81.2	74.2	68.2
19	83.0	85.2	86.6	86.4	88.4	81.2	75.0	75.1	73.8	69.5
20	80.8	83.4	84.6	83.9	84.3	74.3	72.0	68.6	72.8	67.6
21	79.2	83.9	84.1	83.6	83.5	73.2	68.0	65.4	64.8	62.8
22	73.0	82.5	80.6	82.2	78.2	61.6	73.0	75.6	63.5	64.7
23	67.9	81.2	80.4	81.5	78.1	64.6	72.4	76.4	65.2	55.6
24	64.9	77.6	78.5	77.2	68.9	74.4	76.7	78.2	68.6	60.3
25	61.6	70.5	74.8	72.0	62.7	76.8	77.4	75.2	71.1	63.1
26	55.6	63.3	71.7	69.2	67.4	78.2	72.6	73.1	71.1	66.3
27	51.5	56.3	68.6	62.5	73.5	71.6	76.3	79.1	68.0	64.5
28	46.4	56.0	65.6	64.6	72.9	74.2	75.0	72.2	70.4	56.6
29	45.1	54.6	65.8	67.1	69.1	73.2	73.4	73.7	65.7	62.9
30	45.2	51.5	62.5	66.6	63.3	71.7	70.0	70.6	67.8	58.7
31	45.0	48.7	58.7	65.1	67.8	70.6	70.3	67.8	65.5	60.4
32	45.0	47.0	56.0	63.3	64.1	70.4	69.6	67.2	66.7	62.2
33	45.0	45.1	54.2	59.6	61.8	63.7	67.6	65.2	62.2	56.7
34	45.0	45.0	48.0	55.0	57.5	66.4	65.6	63.5	60.0	55.4
35	45.0	45.0	45.2	51.2	52.5	62.5	62.1	60.7	57.3	52.5
36	45.0	45.0	45.0	46.2	48.4	60.2	59.3	57.8	53.5	48.4
37	45.0	45.0	45.0	45.0	45.0	55.1	55.2	52.6	48.7	45.0
38	45.0	45.0	45.0	45.0	45.0	48.5	50.6	49.0	45.3	45.0
39	45.0	45.0	45.0	45.0	45.0	45.4	48.2	49.2	45.6	45.0
40	45.0	45.0	45.0	45.0	45.0	45.0	46.3	46.1	45.0	45.0
A	69.3	76.8	78.5	78.5	78.8	81.5	81.0	81.1	76.3	71.3
D	80.7	86.0	86.7	86.6	86.6	86.5	85.8	85.4	80.7	76.1
OASPL	38.8	92.2	93.5	93.4	94.7	93.1	90.5	89.8	84.9	79.9
PNL	85.7	90.7	92.6	93.1	93.7	94.0	93.0	93.6	88.4	83.2
PNLT	85.7	90.7	92.6	93.1	95.1	94.0	93.0	93.6	89.6	84.9

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 43, 3 DEGREE APPROACH, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-42.0	-34.0	-26.0	-18.0	-10.0	-2.0	0	6.0	14.0	14.5
17	74.2	76.1	76.6	80.0	77.4	78.2	77.2	80.2	73.0	73.0
18	75.7	76.6	78.1	79.9	77.2	76.2	72.5	77.6	71.5	71.1
19	73.5	73.4	74.5	76.5	74.9	70.8	68.3	74.6	71.0	70.0
20	72.8	73.5	73.3	76.1	74.8	66.6	64.3	72.0	70.3	69.2
21	70.9	72.3	74.3	75.1	75.8	65.1	63.1	68.0	64.2	63.8
22	67.8	66.0	69.0	68.3	66.4	63.2	69.6	60.9	61.5	61.1
23	65.5	64.2	68.7	67.7	62.9	69.7	70.7	68.6	59.3	59.1
24	67.7	65.1	70.6	64.3	60.2	73.1	73.7	71.9	53.5	54.2
25	63.7	61.4	65.9	57.6	66.8	73.1	71.0	72.9	56.4	53.2
26	58.6	58.3	60.9	61.5	73.5	67.9	64.1	69.7	60.2	58.1
27	54.2	54.2	52.3	65.9	73.1	68.6	70.0	64.8	63.1	60.3
28	51.7	52.3	55.3	65.9	65.6	70.1	67.7	69.5	59.2	58.2
29	46.6	48.4	56.8	60.9	64.5	68.0	68.7	63.6	50.5	49.6
30	45.0	45.9	53.5	54.0	63.2	66.1	65.6	64.5	55.8	54.1
31	45.2	45.2	50.1	59.4	64.8	66.5	64.5	62.8	52.1	51.6
32	45.0	45.0	49.8	52.7	62.3	65.4	62.9	61.9	58.6	58.0
33	45.0	45.0	48.4	51.4	60.4	63.6	62.0	60.2	53.4	52.8
34	45.0	45.0	46.0	48.2	57.3	60.9	60.3	56.7	48.0	46.6
35	45.0	45.0	45.1	45.6	53.1	58.4	57.6	54.2	48.2	47.0
36	45.0	45.0	45.0	45.1	50.5	55.6	54.8	53.7	46.2	45.7
37	45.0	45.0	45.0	45.0	46.8	50.4	49.7	47.5	45.0	45.0
38	45.0	45.0	45.0	45.0	45.0	47.2	46.4	45.0	45.0	45.0
39	45.0	45.0	45.0	45.0	45.0	47.8	46.5	46.0	45.0	45.0
40	45.0	45.0	45.0	45.0	45.0	48.2	45.2	45.0	45.0	45.0
A	65.6	65.3	68.6	70.7	75.0	76.5	75.7	75.0	66.6	65.6
D	73.9	74.0	76.1	77.4	80.2	81.8	81.4	80.4	72.9	71.8
OASPL	82.0	83.3	84.3	86.2	85.8	88.1	90.1	87.1	78.7	76.2
PNL	80.5	80.4	83.1	84.3	88.1	88.5	87.8	87.5	80.2	79.4
PNLT	80.5	80.4	83.1	86.3	88.1	88.5	87.8	89.2	82.2	81.3

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 44, 110 KI. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-16.5	-13.5	-10.5	-7.5	-4.5	-3.0	-1.5	0	1.5	4.5	6.5
17	82.7	85.5	86.0	88.3	89.1	87.2	78.3	79.4	83.0	80.6	77.7
18	82.7	86.4	85.8	88.8	88.9	85.9	75.9	79.0	79.8	74.4	70.5
19	82.8	87.8	86.7	88.3	88.4	83.5	76.5	74.6	75.9	72.2	71.2
20	79.7	85.6	84.8	85.5	83.3	77.6	75.3	70.4	71.6	72.4	71.4
21	78.7	86.0	85.3	84.9	81.1	77.1	72.1	67.8	65.1	64.4	64.5
22	77.3	83.4	83.0	81.0	74.0	67.5	60.1	69.2	62.4	60.1	62.7
23	75.1	82.0	81.1	79.8	74.8	62.8	65.3	70.4	73.3	62.4	59.4
24	72.1	78.2	76.0	75.4	63.9	69.4	75.1	74.9	75.5	66.8	59.0
25	66.2	73.4	73.2	72.1	66.4	74.3	76.8	76.4	74.5	69.9	64.3
26	58.7	70.3	72.1	67.5	73.6	79.0	77.3	71.6	69.2	71.3	68.3
27	55.0	65.4	68.4	65.5	76.5	75.2	69.9	71.7	72.7	65.4	67.4
28	52.3	58.2	65.4	72.8	74.5	68.7	73.8	73.6	71.8	66.9	58.1
29	50.1	54.5	62.2	73.3	67.5	74.8	72.1	71.1	70.5	66.4	63.0
30	47.7	52.5	59.5	67.8	68.4	69.6	70.4	69.2	66.8	64.9	59.5
31	47.2	52.7	59.6	61.6	67.3	70.8	69.8	69.1	66.5	62.1	60.5
32	46.4	50.5	57.4	64.1	67.6	68.6	69.7	68.1	65.6	63.7	63.2
33	45.4	46.4	52.6	57.8	64.7	66.9	67.7	65.9	63.7	59.1	56.6
34	45.0	45.3	50.0	53.8	61.5	64.5	65.3	63.8	60.9	55.9	53.5
35	45.0	45.0	47.2	49.8	56.8	60.9	62.0	60.2	57.8	55.2	54.3
36	45.0	45.0	45.1	46.9	52.6	56.6	59.8	57.9	55.3	49.7	43.8
37	45.0	45.0	45.0	45.0	48.2	51.6	54.4	53.1	50.5	46.1	45.0
38	45.0	45.0	45.0	45.0	45.0	46.0	49.0	49.1	46.7	45.0	45.0
39	45.0	45.0	45.0	45.0	45.0	45.0	46.1	47.5	47.6	45.0	45.0
40	45.0	45.0	45.0	45.0	45.0	45.0	45.7	46.2	45.8	45.0	45.0
A	71.6	78.7	78.4	79.5	79.9	81.2	80.3	79.4	78.0	74.1	71.5
D	81.7	87.9	87.1	87.2	86.3	86.2	85.2	84.2	82.8	79.1	76.6
OASPL	89.7	94.5	93.9	94.7	94.8	93.1	90.5	89.4	88.8	84.0	81.4
PNL	86.7	92.8	93.0	94.0	94.3	94.0	92.7	91.4	90.3	86.6	84.2
PNLT	86.7	92.8	93.0	95.5	94.3	95.2	92.7	91.4	90.3	87.6	85.8

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0



TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 45, 110 KT. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-19.0	-15.0	-11.0	-7.0	-4.0	-3.0	0	1.0	5.0	9.0	10.5
17	79.0	83.6	84.9	88.3	88.8	88.2	77.6	79.1	80.6	74.3	71.9
18	79.2	83.7	85.9	88.1	88.1	87.5	77.6	78.3	74.3	70.4	69.0
19	78.8	84.0	85.6	88.1	87.1	83.8	72.9	72.5	72.1	68.7	68.2
20	74.1	81.9	82.3	85.4	82.5	77.4	63.3	61.7	67.8	68.8	69.0
21	74.0	82.7	80.5	83.6	79.1	73.5	65.8	66.1	65.0	64.8	66.8
22	70.8	80.7	79.5	80.6	71.2	63.6	70.4	75.6	63.1	60.1	63.8
23	62.7	77.3	78.1	78.1	70.6	68.3	73.6	74.2	68.4	58.0	58.2
24	61.6	71.4	74.5	71.4	67.7	72.5	79.7	75.5	70.4	61.4	58.8
25	60.4	66.4	70.9	63.6	70.4	72.0	69.9	69.7	67.1	61.2	57.5
26	55.0	60.1	70.8	64.6	74.4	73.1	74.8	74.9	64.5	63.1	63.0
27	55.0	57.3	65.4	65.4	72.8	68.9	77.2	75.2	70.8	60.1	60.1
28	55.0	55.2	60.1	62.8	68.4	72.7	72.0	72.9	64.7	57.4	55.9
29	55.0	55.0	57.9	64.2	72.2	70.4	70.4	70.9	65.0	58.4	57.8
30	55.0	55.0	55.5	59.7	68.0	69.5	68.9	69.8	64.0	56.1	55.7
31	55.0	55.0	56.6	57.5	69.3	67.7	68.1	68.9	63.2	55.5	56.5
32	55.0	55.0	57.2	60.7	67.2	65.9	67.1	68.2	64.3	60.1	61.5
33	55.0	55.0	55.4	55.5	64.8	62.7	65.0	65.3	60.3	55.0	55.4
34	55.0	55.0	55.0	55.2	61.1	60.2	62.9	63.0	57.6	55.0	55.0
35	55.0	55.0	55.0	55.0	56.7	57.3	58.3	59.0	55.8	55.0	55.0
36	55.0	55.0	55.0	55.0	55.0	55.5	56.2	55.8	55.0	55.0	55.0
37	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
38	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	65.7	74.2	75.6	76.1	79.0	78.6	80.0	80.0	74.5	67.7	67.8
D	76.5	83.4	84.0	85.8	85.5	84.2	84.4	84.7	79.6	74.2	74.5
OASPL	84.9	90.8	91.6	94.4	94.1	93.2	87.8	87.9	85.1	80.7	79.5
PNL	84.9	90.8	91.7	93.3	93.9	92.6	92.4	91.8	87.5	83.1	83.4
PNLT	84.9	90.8	91.7	94.7	95.3	93.6	92.4	91.8	87.5	84.7	85.3

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 24, 6 DEGREE APPROACH, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-56.5	-46.5	-36.5	-26.5	-16.5	-6.5	0	3.5	13.5
17	78.7	73.8	79.0	77.8	84.5	81.3	80.4	77.2	70.3
18	79.2	75.9	78.4	78.5	82.4	81.1	81.6	73.1	66.6
19	78.3	71.5	74.1	72.9	76.9	71.3	72.6	78.1	66.6
20	77.5	72.9	74.3	71.8	74.8	73.6	71.1	74.8	70.1
21	75.5	70.5	71.8	70.6	73.6	74.7	68.6	64.4	70.3
22	70.0	65.7	68.3	62.3	73.0	63.3	74.1	71.0	68.7
23	64.7	62.9	65.4	59.2	70.5	68.8	76.9	73.6	63.2
24	60.4	64.4	62.4	59.9	64.7	77.1	76.4	74.1	56.7
25	65.2	63.8	57.6	60.7	65.6	76.0	70.3	72.3	54.4
26	64.1	58.0	59.1	55.9	70.2	73.3	65.0	65.5	61.0
27	59.1	56.7	52.4	59.5	70.2	67.1	70.6	70.3	64.0
28	54.3	48.4	48.4	58.6	66.2	72.9	65.5	65.4	59.4
29	49.1	48.7	47.8	53.5	59.9	69.4	67.5	67.2	51.2
30	46.0	47.2	46.1	46.8	57.2	67.2	65.3	63.7	54.6
31	45.0	45.0	45.1	45.1	58.3	64.8	62.8	61.5	54.3
32	45.0	45.0	45.0	45.5	54.6	64.1	63.3	62.0	60.1
33	45.0	45.0	45.0	45.0	53.2	61.8	62.4	66.0	58.4
34	45.0	45.0	45.0	45.0	49.6	60.6	59.8	57.1	50.1
35	45.0	45.0	45.0	45.0	46.4	56.3	57.3	54.5	51.7
36	45.0	45.0	45.0	45.0	45.0	54.0	55.9	55.2	50.9
37	45.0	45.0	45.0	45.0	45.0	48.8	51.6	49.6	45.0
38	45.0	45.0	45.0	45.0	45.0	45.8	48.7	46.9	45.0
39	45.0	45.0	45.0	45.0	45.0	45.0	49.3	48.9	45.0
40	45.0	45.0	45.0	45.0	45.0	45.0	46.8	45.6	45.0
A	67.2	64.3	64.1	63.9	72.0	78.1	75.9	75.4	67.9
D	76.4	72.0	74.1	71.9	79.1	82.8	81.8	80.9	74.3
OASPL	84.9	80.9	83.6	82.5	88.1	88.2	86.7	84.8	79.8
PNL	83.5	79.8	80.8	80.2	86.4	90.4	89.9	89.0	81.8
PNLT	83.5	79.8	80.8	80.2	86.4	92.0	89.9	91.2	83.1

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 35, 110 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-15.0	-12.0	-9.0	-6.0	-3.0	0	3.0	6.0	8.5
17	79.5	83.1	87.9	89.1	88.4	81.7	84.3	81.6	81.0
18	80.0	82.4	86.3	86.5	86.7	84.3	83.5	77.6	77.7
19	81.2	82.8	87.7	86.9	83.9	75.8	72.1	72.1	69.9
20	79.4	82.2	86.7	84.3	78.4	75.2	72.0	70.3	65.6
21	78.8	83.2	86.7	83.1	80.5	78.7	74.0	66.2	68.8
22	75.2	83.2	84.1	79.5	76.2	76.1	73.5	65.1	67.1
23	75.4	81.3	82.3	79.7	79.6	79.0	77.9	69.3	66.3
24	72.9	77.4	76.4	74.7	79.0	79.5	76.9	69.1	64.1
25	66.9	77.1	73.2	70.5	78.4	74.9	72.4	69.8	64.3
26	60.6	75.4	70.6	70.4	80.3	70.9	70.0	70.5	66.3
27	58.0	75.8	66.2	72.0	76.7	75.0	75.9	64.6	66.3
28	52.9	73.2	66.9	69.9	72.1	75.1	70.0	67.2	59.8
29	51.7	69.7	69.2	63.9	72.2	74.1	71.4	65.3	60.9
30	49.3	64.5	64.4	64.1	68.8	70.3	67.7	63.5	61.2
31	47.5	59.8	60.7	62.9	67.2	68.7	64.5	62.1	59.2
32	45.0	56.8	58.0	57.7	66.4	66.9	65.0	64.6	61.9
33	45.0	52.1	54.1	54.2	63.6	66.1	64.1	59.1	56.0
34	45.0	49.2	50.9	52.5	61.3	62.8	58.3	55.5	52.8
35	45.0	45.9	47.8	48.8	57.6	61.1	56.2	56.8	54.0
36	45.0	45.2	46.1	46.5	54.9	58.8	54.9	52.1	48.4
37	45.0	45.0	45.0	45.0	49.8	54.8	49.7	49.3	45.1
38	45.0	45.0	45.0	45.0	45.7	51.1	47.4	45.7	45.0
39	45.0	45.0	45.0	45.0	45.0	47.5	47.4	45.0	45.0
40	45.0	45.0	45.0	45.0	45.0	46.8	45.5	45.0	45.0
A	70.8	80.2	78.8	77.7	81.4	80.8	78.6	74.3	70.7
D	80.1	86.4	87.4	85.6	86.8	85.8	83.5	79.1	76.0
OASFL	87.7	91.8	94.4	94.0	93.8	90.0	88.5	85.0	84.1
PNL	86.2	93.0	94.2	92.7	95.4	93.9	91.6	87.0	84.3
PNLT	86.2	93.0	95.3	92.7	95.4	93.9	91.6	88.3	85.7

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 36, 110 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-15.5	-12.5	-9.5	-6.5	-3.5	-.5	0	2.5	5.5	6.0
17	82.1	85.3	86.7	87.8	86.4	77.6	79.5	83.2	75.5	73.6
18	80.3	86.2	87.4	87.4	85.8	83.8	83.7	73.1	71.2	70.6
19	78.9	87.1	87.7	87.4	82.9	71.1	68.6	64.4	66.3	66.2
20	76.6	86.6	87.0	85.6	77.6	69.5	68.4	64.2	64.3	63.2
21	77.3	87.4	87.0	84.2	79.3	74.1	72.2	62.2	61.5	61.8
22	75.2	86.1	83.6	78.0	72.2	67.7	69.7	70.3	61.3	60.7
23	70.0	84.6	80.5	75.5	69.9	72.1	73.4	75.3	62.1	60.0
24	66.4	80.5	75.3	72.3	66.5	77.6	78.3	76.0	65.0	62.2
25	59.9	77.4	71.3	63.5	73.6	71.5	72.0	71.4	68.2	66.6
26	57.6	75.9	69.6	66.6	77.9	68.5	67.6	67.5	69.9	69.3
27	56.4	74.9	65.7	72.4	76.3	72.4	73.9	76.0	64.6	64.5
28	53.5	69.5	66.2	73.2	69.7	73.5	72.5	71.2	67.5	64.3
29	49.2	64.6	66.0	73.3	70.1	72.0	73.0	72.6	65.9	65.0
30	46.4	57.5	62.3	65.3	67.5	69.5	69.7	67.7	64.4	62.1
31	45.0	53.2	58.4	66.8	64.3	68.4	68.0	65.3	61.9	60.7
32	45.0	51.6	54.3	61.2	63.6	67.9	67.8	65.0	63.1	62.4
33	45.0	48.3	49.4	57.8	60.5	65.9	66.2	62.4	58.0	57.0
34	45.0	46.2	47.9	54.8	57.7	62.9	63.4	59.1	54.5	53.6
35	45.0	45.0	45.0	49.7	55.3	60.4	60.9	57.1	54.1	53.7
36	45.0	45.0	45.0	46.7	51.4	58.3	58.8	55.2	50.4	49.1
37	45.0	45.0	45.0	45.0	47.5	55.1	55.4	50.2	47.8	46.4
38	45.0	45.0	45.0	45.0	45.0	51.1	51.2	48.1	45.0	45.0
39	45.0	45.0	45.0	45.0	45.0	47.8	48.2	47.4	45.0	45.0
40	45.0	45.0	45.0	45.0	45.0	48.1	47.9	45.5	45.0	45.0
A	67.9	81.1	78.1	78.9	78.9	78.8	79.2	78.3	73.3	71.9
D	78.4	88.6	87.2	85.6	84.1	83.2	83.5	82.8	77.4	76.3
OASPL	87.2	94.7	94.5	93.8	91.4	86.7	87.5	85.2	81.4	80.2
PNL	84.4	94.9	93.7	93.2	92.5	91.7	92.1	90.5	85.1	84.1
PNLT	84.4	94.9	93.7	94.5	92.5	91.7	92.1	91.5	86.2	85.3

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 44, 110 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-16.5	-13.5	-12.0	-10.5	-7.5	-4.5	-1.5	0	1.5	4.5	6.5
17	82.1	85.4	87.0	86.2	87.0	87.1	80.1	78.6	83.0	77.0	69.1
18	80.1	85.3	87.1	85.7	86.2	86.3	83.3	83.2	78.2	71.6	71.8
19	78.7	86.8	87.2	88.0	87.2	86.7	74.5	70.6	68.2	66.3	67.0
20	77.9	86.1	87.0	87.3	86.3	83.7	74.2	68.2	63.5	67.6	62.9
21	78.2	86.6	88.2	87.3	85.8	82.2	74.0	69.4	59.9	61.1	62.1
22	73.7	84.6	87.3	84.9	81.6	73.2	63.9	70.6	74.7	56.0	60.9
23	67.5	82.8	85.5	82.5	76.8	72.6	70.2	74.0	75.4	66.2	56.8
24	65.8	79.1	79.1	77.5	69.5	64.3	75.6	77.3	75.7	68.8	59.9
25	63.4	73.1	73.4	71.9	62.8	71.7	75.4	70.2	69.6	69.7	63.3
26	63.4	69.3	71.1	70.0	59.7	76.9	72.8	66.6	69.6	67.9	67.9
27	62.7	67.5	71.6	67.5	64.4	74.8	69.3	73.5	75.1	65.6	66.1
28	53.7	62.4	65.5	60.0	67.8	70.2	74.3	71.4	68.6	67.9	58.8
29	51.8	56.1	59.7	61.2	65.9	66.5	71.2	73.3	70.1	65.0	64.0
30	52.3	47.9	52.5	59.5	56.1	66.2	70.4	69.2	68.8	65.4	59.3
31	48.2	47.4	49.4	55.1	54.5	61.0	68.4	67.6	66.1	63.2	60.5
32	45.2	46.7	47.5	50.0	53.3	61.3	68.6	67.4	65.6	68.3	63.6
33	45.0	45.0	45.5	48.9	47.7	57.9	65.5	66.0	63.6	62.4	57.2
34	45.0	45.0	45.0	45.7	46.1	54.9	64.1	63.7	61.3	57.5	55.2
35	45.0	45.0	45.0	45.0	45.0	52.1	61.3	61.1	58.9	57.0	54.6
36	45.0	45.0	45.0	45.0	45.0	48.9	59.2	60.1	57.3	53.7	50.0
37	45.0	45.0	45.0	45.0	45.0	45.2	54.7	54.8	53.3	51.6	47.0
38	45.0	45.0	45.0	45.0	45.0	45.0	51.7	52.2	50.8	48.1	45.4
39	45.0	45.0	45.0	45.0	45.0	45.0	46.7	49.5	51.0	48.3	45.0
40	45.0	45.0	45.0	45.0	45.0	45.0	46.7	49.2	49.3	45.2	45.0
A	68.7	78.6	80.3	78.6	76.1	78.0	79.6	79.0	78.3	75.1	71.6
D	78.4	87.4	89.2	87.5	85.6	84.8	84.0	83.5	82.9	79.9	75.9
OASPL	87.0	93.9	95.3	94.4	93.7	93.0	87.5	86.9	86.6	82.6	80.0
PNL	85.3	93.0	94.7	93.7	92.0	92.4	91.8	91.7	90.8	87.8	83.8
PNLT	85.3	93.0	94.7	93.7	93.2	92.4	93.1	92.7	90.8	89.6	85.4

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 45, 110 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-12.0	-9.5	-7.0	-4.5	-2.0	0	.5	3.0	5.5	7.5
17	78.5	86.7	87.6	85.7	77.4	75.8	78.3	80.6	74.3	69.7
18	76.8	87.3	87.3	84.7	83.7	82.1	81.6	70.3	69.5	70.2
19	75.1	88.3	87.0	83.6	70.3	66.7	66.6	65.3	64.8	67.7
20	72.7	86.2	84.8	79.4	67.0	60.8	61.3	59.9	64.0	63.2
21	73.2	85.7	83.7	78.9	69.9	62.3	64.3	61.9	61.6	61.7
22	71.7	83.0	79.4	68.7	64.5	72.2	72.2	72.5	61.5	58.3
23	66.1	79.2	75.3	66.1	71.7	75.5	76.7	72.2	67.8	60.0
24	65.8	73.5	69.8	61.3	70.1	78.4	79.3	71.6	69.2	62.7
25	63.5	67.8	64.1	66.0	70.7	70.0	67.9	63.9	67.1	63.3
26	58.6	67.5	58.6	68.2	67.9	70.0	71.8	68.7	62.0	62.9
27	59.2	65.2	61.0	66.0	67.3	75.3	74.4	71.0	67.7	58.1
28	56.3	60.6	60.9	61.5	69.0	70.2	70.9	69.0	65.2	62.3
29	55.0	59.0	60.4	64.0	65.9	70.7	69.9	67.3	64.3	59.1
30	55.0	56.2	57.1	59.9	65.0	69.2	68.4	65.6	61.0	59.6
31	55.0	55.0	55.2	59.8	62.9	67.9	67.3	64.7	62.0	57.1
32	55.0	55.0	56.3	58.1	62.1	66.8	65.9	64.1	65.8	59.5
33	55.0	55.0	55.0	56.8	61.3	65.5	64.5	62.4	59.3	55.5
34	55.0	55.0	55.0	55.0	58.4	62.8	62.1	58.5	55.9	55.0
35	55.0	55.0	55.0	55.0	57.4	60.1	59.3	56.5	55.2	55.0
36	55.0	55.0	55.0	55.0	56.1	58.5	58.3	55.4	55.0	55.0
37	55.0	55.0	55.0	55.0	55.0	55.3	55.0	55.0	55.0	55.0
38	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	66.6	76.3	73.8	71.9	74.9	78.9	78.9	75.2	72.9	67.9
D	75.6	85.9	84.0	80.3	80.0	83.4	83.6	80.1	78.0	73.6
OASPL	84.1	93.9	92.9	90.0	85.4	86.2	87.0	82.8	80.5	78.6
PNL	84.6	93.5	92.0	89.5	88.7	91.8	92.0	88.2	86.6	83.1
PNLT	84.6	93.5	92.0	90.6	88.7	91.8	92.0	88.2	88.3	84.3

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 24, 6 DEGREE APPROACH, CENTERLINE MIC. ( SOFT SIDE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-28.0	-23.0	-18.0	-13.0	-8.0	-3.0	-1.5	0	2.0	7.0	10.0
17	79.4	81.1	81.9	85.4	85.9	84.1	83.6	82.6	80.6	78.0	75.7
18	80.3	82.5	83.3	84.6	83.4	83.1	81.6	79.9	75.7	76.0	76.0
19	77.8	79.9	80.4	79.6	77.6	68.7	66.5	70.2	71.0	72.3	71.6
20	78.3	77.3	75.9	77.0	72.8	68.7	78.1	82.6	85.1	68.9	72.2
21	76.1	76.3	75.1	77.5	73.1	79.9	85.8	86.0	86.9	71.5	69.6
22	72.5	72.1	70.3	72.9	72.8	85.7	88.5	86.5	87.0	79.6	64.7
23	71.9	70.4	66.5	67.8	78.1	86.8	87.2	80.4	81.8	81.1	72.5
24	65.6	60.8	66.3	72.6	82.7	82.8	79.0	76.4	76.8	78.0	73.6
25	59.0	66.6	76.7	76.9	80.8	76.9	83.1	79.9	79.7	71.2	73.2
26	69.7	73.5	80.0	77.0	73.4	79.1	79.5	74.3	74.4	70.9	68.5
27	70.0	73.1	74.6	72.7	70.6	73.2	76.6	76.0	74.3	71.7	61.4
28	68.2	67.6	63.1	62.3	70.6	72.6	72.5	72.3	70.1	66.2	65.2
29	62.5	60.1	61.8	68.3	70.8	70.7	71.0	69.5	68.1	65.3	61.0
30	53.7	58.3	60.2	64.8	67.1	67.3	68.5	69.3	66.6	64.0	59.6
31	58.2	58.4	58.2	65.9	66.0	66.8	68.3	68.7	65.5	62.3	57.4
32	52.0	52.9	55.9	60.8	63.0	64.9	67.5	67.3	64.5	65.4	63.6
33	49.2	48.3	52.2	58.4	61.1	65.4	67.1	65.5	63.7	64.5	63.7
34	47.4	45.9	48.5	56.3	62.4	63.4	64.7	63.0	61.5	59.1	54.7
35	45.0	45.0	45.1	51.3	58.2	61.1	61.4	60.6	59.8	57.7	53.6
36	45.0	45.0	45.0	47.8	55.6	57.5	59.3	57.9	57.0	57.1	51.6
37	45.0	45.0	45.0	45.0	52.4	54.8	57.1	55.9	54.3	53.9	48.1
38	45.0	45.0	45.0	45.0	48.3	52.9	55.7	55.3	54.7	52.5	45.9
39	45.0	45.0	45.0	45.0	45.1	53.6	56.8	57.7	59.2	55.5	45.7
40	45.0	45.0	45.0	45.0	45.7	52.2	57.8	60.6	62.3	52.7	45.0
A	72.7	73.8	78.1	77.9	80.5	82.4	84.2	81.6	81.2	77.1	74.3
D	80.6	82.2	84.7	85.2	87.7	90.7	92.3	90.0	90.2	85.4	82.0
OASPL	85.9	87.9	88.6	90.7	91.9	93.8	95.0	94.4	94.3	89.2	86.3
PNL	86.3	87.7	91.0	91.3	94.0	96.7	98.0	96.2	96.0	92.0	87.1
PNLT	88.1	87.7	91.0	92.8	94.0	96.7	98.0	96.2	96.0	92.0	88.5

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 27, 9 DEGREE APPROACH, CENTERLINE MIC. ( SOFT SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-23.0	-18.0	-13.0	-8.0	-3.0	0	2.0	7.0	12.0
17	80.0	81.7	83.3	83.1	83.3	82.6	80.9	78.9	74.9
18	81.3	82.9	84.8	83.8	84.6	80.1	78.5	75.3	72.4
19	78.4	77.6	79.3	76.5	70.4	73.9	78.1	72.4	70.7
20	74.8	73.7	72.8	73.0	71.1	82.6	85.7	72.0	73.4
21	72.8	72.7	71.7	68.2	82.7	85.4	86.4	70.0	71.9
22	66.1	65.7	61.7	75.7	87.5	86.3	86.0	80.2	72.4
23	63.3	62.5	71.6	81.3	89.8	79.3	80.3	84.1	68.0
24	64.6	71.0	81.7	86.7	84.7	75.8	77.1	83.5	64.9
25	74.1	77.4	84.5	84.6	83.0	79.6	79.8	78.4	70.2
26	78.4	79.4	82.4	76.2	82.9	73.5	74.9	76.0	72.5
27	74.5	73.1	69.8	77.4	72.7	74.5	74.4	75.3	70.4
28	65.8	64.2	71.4	69.5	72.8	73.1	72.1	67.9	62.6
29	61.8	68.0	67.7	71.1	70.6	69.3	69.8	67.9	65.0
30	59.1	58.7	65.7	65.6	68.6	67.9	67.7	64.9	62.1
31	55.7	60.2	61.6	64.2	68.3	67.6	66.5	62.8	60.0
32	55.6	57.7	60.3	62.7	67.4	66.4	65.9	64.2	66.2
33	51.5	56.1	57.5	62.3	65.9	64.8	65.0	63.7	65.2
34	46.9	51.6	56.3	60.3	65.5	64.1	62.9	58.8	55.9
35	45.0	47.5	52.7	58.8	63.1	61.4	60.8	57.2	55.9
36	45.0	45.4	50.2	58.3	59.1	58.4	58.4	56.0	52.6
37	45.0	45.0	45.7	52.6	56.3	55.7	55.7	52.7	48.8
38	45.0	45.0	45.0	48.1	52.2	55.1	55.3	51.7	46.3
39	45.0	45.0	45.0	45.6	52.8	58.3	59.3	54.8	45.7
40	45.0	45.0	45.0	45.7	51.9	61.6	62.0	52.8	45.0
A	76.2	77.8	82.8	83.2	85.2	81.2	81.6	81.3	75.0
D	83.0	85.0	89.5	91.2	93.4	89.7	90.1	89.2	82.3
OASPL	86.9	88.2	91.3	92.9	95.5	94.2	94.7	91.0	84.7
PNL	89.4	90.7	94.3	96.3	99.1	96.0	96.1	94.3	88.1
PNLT	89.4	92.9	94.3	97.5	99.1	96.0	96.1	94.3	89.4

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0



# TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 29, 60 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-50.5	-41.0	-31.5	-22.0	-12.5	-3.0	0	6.5	16.0	18.0
17	77.5	75.3	78.0	79.9	84.3	81.0	75.8	74.9	73.8	72.4
18	77.8	76.1	79.3	81.3	84.7	77.7	73.4	69.5	68.8	68.7
19	74.4	73.2	77.3	78.8	79.4	64.2	66.2	67.5	65.8	63.5
20	74.7	70.5	76.1	77.1	77.8	71.1	76.3	67.8	69.8	71.2
21	75.2	69.0	76.6	78.4	77.7	77.5	77.1	68.1	63.6	63.6
22	71.8	70.2	74.3	74.9	70.3	81.9	81.5	74.9	65.4	64.5
23	70.9	71.4	72.2	71.8	65.6	79.4	72.8	74.9	61.2	58.3
24	66.0	66.5	66.7	67.9	68.6	78.0	71.4	67.8	60.8	57.6
25	65.2	66.5	59.2	58.0	74.7	75.1	72.9	60.9	61.8	59.9
26	67.8	68.4	55.8	57.1	77.4	75.7	67.1	67.1	62.4	61.4
27	64.6	65.8	52.8	58.7	72.7	71.4	69.3	63.5	58.8	60.0
28	55.5	56.7	52.5	60.6	63.3	69.8	68.7	64.4	57.2	51.1
29	48.9	45.9	50.2	57.0	66.3	67.8	67.4	65.3	59.3	58.1
30	45.3	45.7	47.9	51.3	60.5	66.9	67.3	61.8	56.2	53.1
31	45.0	47.2	46.8	50.1	62.1	65.6	67.5	59.8	54.8	54.1
32	45.0	47.8	45.1	48.5	58.6	66.7	65.3	62.9	58.7	61.7
33	45.0	45.0	45.0	45.8	57.3	65.8	63.3	60.4	58.3	57.4
34	45.0	45.0	45.0	46.5	55.3	62.3	61.5	55.1	52.7	48.8
35	45.0	45.0	45.0	45.0	50.4	60.9	58.9	55.4	52.6	48.2
36	45.0	45.0	45.0	45.0	47.0	57.1	56.1	53.8	49.6	45.5
37	45.0	45.0	45.0	45.0	45.0	54.1	53.7	50.1	45.8	45.0
38	45.0	45.0	45.0	45.0	45.0	51.0	52.7	49.0	45.0	45.0
39	45.0	45.0	45.0	45.0	45.0	51.9	55.6	50.9	45.0	45.0
40	45.0	45.0	45.0	45.0	45.0	50.8	57.3	48.2	45.0	45.0
A	68.9	69.5	67.4	69.5	76.7	78.7	77.6	73.2	67.4	67.7
D	78.2	77.4	78.6	80.3	84.2	87.0	85.1	80.8	75.4	75.3
OASPL	83.5	81.9	84.7	86.8	90.0	91.3	90.2	84.6	79.5	78.9
PNL	83.4	82.8	83.6	85.5	90.7	92.8	91.4	86.9	81.8	81.4
PNLT	83.4	82.8	83.6	85.5	92.1	92.8	91.4	86.9	81.8	83.4

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE E-VII

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 30, 60 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-23.0	-17.0	-11.0	-5.0	0	1.0	7.0	13.0	19.0	21.0
17	78.5	80.6	82.3	85.0	74.1	72.2	74.8	71.3	68.8	69.4
18	78.5	79.9	81.3	82.6	72.9	69.0	69.1	65.9	66.3	65.0
19	78.5	78.8	78.6	77.1	60.1	58.7	65.1	64.3	61.7	61.6
20	77.4	76.4	74.1	71.6	72.3	75.5	62.5	66.3	65.9	64.2
21	75.9	73.6	73.5	69.8	76.0	73.8	58.2	61.7	63.4	62.4
22	72.4	72.4	69.8	70.3	79.4	77.3	66.8	59.9	63.1	63.6
23	71.1	71.9	65.1	75.1	74.1	68.4	70.6	55.7	59.7	58.5
24	65.2	63.4	64.0	78.5	68.8	65.9	66.6	50.7	53.4	55.1
25	55.1	57.9	67.9	77.0	72.7	68.5	61.5	52.7	50.9	51.1
26	51.8	70.1	73.7	72.0	68.5	66.0	58.3	54.5	50.4	49.4
27	51.1	70.9	71.3	71.1	69.6	68.3	63.5	55.4	52.9	50.8
28	49.3	67.2	62.1	67.8	67.4	67.5	58.3	51.0	50.5	50.1
29	49.3	58.2	61.7	62.5	66.5	67.6	59.6	48.0	48.3	48.8
30	46.3	52.1	58.2	60.8	67.9	68.0	57.2	49.7	48.0	48.3
31	46.9	51.2	56.6	60.5	67.4	67.7	55.1	49.8	51.5	52.6
32	45.4	48.5	54.7	58.5	66.1	65.3	62.2	59.6	60.8	60.5
33	45.0	47.7	55.1	56.4	65.3	63.7	56.1	52.7	54.4	55.0
34	45.0	47.0	50.8	55.8	62.7	62.5	53.4	47.2	49.9	52.6
35	45.0	45.0	47.1	53.9	61.6	61.2	55.7	49.5	57.6	57.9
36	45.0	45.0	45.0	53.1	58.6	58.4	50.9	45.0	46.3	46.7
37	45.0	45.0	45.0	48.8	55.3	55.8	47.8	45.0	45.0	45.0
38	45.0	45.0	45.0	46.1	52.6	54.0	45.0	45.0	45.0	45.0
39	45.0	45.0	45.0	45.0	53.2	55.0	45.0	45.0	45.0	45.0
40	45.0	45.0	45.0	45.0	54.2	56.5	45.0	45.0	45.0	45.0
A	66.7	72.3	73.6	76.5	77.2	76.0	69.3	63.4	65.5	65.3
D	78.4	80.1	81.1	84.4	84.8	83.3	77.2	71.7	74.4	74.3
OASPL	84.8	85.8	87.0	89.9	89.1	88.3	80.2	76.2	74.8	74.8
PNL	83.2	85.7	87.3	90.4	90.7	89.4	83.1	78.6	80.3	80.5
PNLT	83.2	85.7	87.3	90.4	90.7	89.4	85.3	81.4	83.5	83.2

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 31, 60 KT. FLY BY, CENTERLINE MIC. ( SOFI SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-42.0	-34.0	-26.0	-18.0	-10.0	-2.0	-1.0	0	6.0	14.0	15.0
17	78.3	78.6	79.5	80.9	83.6	76.8	75.6	73.7	76.6	73.7	72.9
18	78.6	79.4	80.3	82.0	83.4	75.0	73.9	72.1	72.2	68.3	67.4
19	75.7	77.0	77.3	77.3	77.0	60.9	63.7	63.8	64.1	65.3	63.6
20	75.8	76.3	74.2	76.4	73.8	73.1	75.0	75.7	63.6	66.8	65.8
21	74.9	76.0	73.3	77.0	73.2	77.6	78.7	76.7	66.4	60.9	59.3
22	72.2	74.2	71.5	74.6	63.4	81.1	81.9	80.9	75.5	55.8	55.8
23	71.0	73.0	71.8	72.6	67.6	75.5	74.8	72.4	76.5	61.3	58.4
24	66.4	67.8	67.4	63.6	73.8	72.9	72.1	71.3	69.3	62.2	57.1
25	62.8	62.2	60.5	63.6	75.0	76.2	76.5	73.9	66.1	62.1	59.5
26	62.3	61.3	59.2	72.2	73.2	71.9	71.1	68.7	69.6	60.9	58.7
27	56.6	59.8	59.6	73.5	66.0	72.6	73.5	71.1	66.9	55.0	52.9
28	50.9	53.1	55.5	69.0	67.3	67.9	69.7	68.9	66.5	59.4	55.2
29	46.4	47.0	52.9	59.6	59.1	67.0	68.2	68.4	66.9	56.1	54.0
30	45.0	46.5	51.2	59.2	58.5	67.8	69.8	68.4	64.0	56.7	54.7
31	45.1	47.1	51.5	59.0	57.5	67.2	68.6	68.1	62.1	55.1	53.4
32	45.0	45.1	47.7	55.2	58.9	66.2	67.4	64.8	62.3	64.1	62.3
33	45.0	45.0	47.4	51.6	55.4	65.4	65.1	63.4	61.3	61.1	59.4
34	45.0	45.0	45.9	49.9	54.9	63.1	63.0	61.6	58.2	53.4	51.1
35	45.0	45.0	45.0	48.2	52.9	59.8	60.4	59.5	56.8	52.6	49.6
36	45.0	45.0	45.0	45.6	49.1	57.7	58.4	56.3	54.8	49.8	47.6
37	45.0	45.0	45.0	45.0	45.7	54.5	55.6	54.5	51.7	46.0	45.4
38	45.0	45.0	45.0	45.0	45.0	53.3	54.0	53.0	49.8	45.0	45.0
39	45.0	45.0	45.0	45.0	45.0	54.6	55.8	55.3	52.4	45.0	45.0
40	45.0	45.0	45.0	45.0	45.0	54.4	56.6	57.4	50.4	45.0	45.0
A	66.7	68.1	67.6	75.0	74.6	78.3	78.7	77.7	74.5	69.6	67.5
D	77.6	79.2	78.1	82.2	82.7	85.6	86.2	84.8	82.1	77.0	75.0
CASPL	84.1	84.9	85.2	87.4	89.4	90.4	90.9	90.4	85.8	79.8	78.6
PNL	82.8	84.0	83.5	88.0	88.3	92.0	92.7	91.3	88.4	83.0	81.0
PNLT	82.6	84.0	83.5	88.0	89.9	92.0	92.7	91.3	88.4	85.0	83.0

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 32, 99 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-18.5	-15.0	-11.5	-8.0	-4.5	-2.0	-1.0	0	2.5	6.0	7.0
17	80.8	86.5	84.8	86.7	88.2	82.5	76.6	78.0	78.0	74.5	75.1
18	81.6	86.0	84.9	86.2	86.1	83.1	80.9	78.4	69.0	72.3	72.8
19	81.7	86.2	84.8	86.8	84.7	77.0	69.8	63.1	62.2	65.3	67.4
20	82.1	84.0	83.0	84.6	80.9	70.2	69.0	74.3	75.6	63.4	64.3
21	82.2	83.2	83.4	84.2	78.7	73.7	79.1	81.0	69.8	57.3	58.2
22	81.2	78.3	81.7	80.1	69.3	77.1	79.9	81.8	77.4	64.5	58.2
23	79.5	74.8	79.7	76.5	75.4	84.3	83.3	79.1	71.9	69.6	66.4
24	75.1	68.0	75.2	65.6	80.4	84.9	79.7	73.2	66.2	67.1	64.8
25	68.9	63.0	65.6	66.1	82.2	77.9	77.9	77.2	70.0	63.4	63.8
26	61.7	61.7	59.9	66.1	79.5	81.2	81.2	74.4	66.2	62.1	58.1
27	55.9	54.2	56.0	67.5	71.4	79.1	76.6	74.9	70.2	67.3	62.9
28	52.3	51.0	58.7	64.5	74.0	74.4	73.8	70.9	68.2	61.1	60.6
29	47.4	50.3	58.6	56.5	68.8	73.4	73.1	69.5	66.1	63.8	61.2
30	46.5	49.3	54.9	61.6	69.1	70.3	69.8	68.0	63.6	61.7	58.4
31	44.2	47.6	50.7	55.4	64.3	70.3	69.4	68.1	62.2	60.2	57.6
32	44.5	45.4	48.8	51.6	62.0	69.5	68.8	67.3	63.3	67.8	65.0
33	43.6	45.0	47.6	50.1	59.7	67.8	66.7	66.7	62.2	59.5	56.7
34	43.5	45.0	45.5	47.2	58.4	68.0	66.6	64.7	60.5	56.4	54.0
35	43.5	45.0	45.0	45.0	55.4	65.0	64.3	63.0	59.6	57.5	55.8
36	43.5	45.0	45.0	45.0	51.5	61.3	60.9	59.8	58.2	53.0	51.2
37	43.5	45.0	45.0	45.0	48.0	57.4	57.5	57.1	55.7	50.7	47.7
38	43.5	45.0	45.0	45.0	45.7	53.4	54.6	54.7	55.0	48.4	45.7
39	43.5	45.0	45.0	45.0	45.0	50.2	54.1	57.4	57.7	47.9	45.4
40	43.5	45.0	45.0	45.0	45.0	47.8	51.6	56.7	58.7	45.8	45.0
A	74.5	72.7	74.9	74.6	81.2	83.7	82.6	79.7	75.5	73.0	70.5
D	85.4	85.4	86.3	86.3	88.8	90.8	89.8	87.7	83.0	80.1	77.9
OASPL	89.8	91.9	91.5	92.9	93.3	92.9	91.5	90.6	87.5	83.0	82.3
PNL	88.7	89.3	90.2	91.1	94.8	97.2	96.0	93.6	89.2	86.6	84.2
PNLT	88.7	89.3	90.2	93.0	96.1	97.2	96.0	93.6	89.2	89.3	86.9

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 33. 99 KT. FLY BY. CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-20.0	-16.0	-12.0	-8.0	-4.0	-1.5	0	4.0	8.0	11.0
17	80.5	84.0	84.6	87.0	87.2	80.1	78.1	76.6	74.9	71.6
18	81.0	85.3	84.4	85.7	85.0	81.8	78.2	73.7	73.8	71.4
19	80.8	87.0	83.7	86.0	82.1	71.5	63.6	65.2	69.6	67.5
20	78.0	86.9	79.9	83.7	78.5	68.1	74.2	65.6	67.3	66.7
21	76.6	87.8	78.1	82.9	74.9	77.7	81.6	66.4	61.4	63.1
22	72.3	85.6	79.9	72.7	69.7	79.7	81.3	74.2	54.9	61.2
23	71.1	85.3	77.9	75.0	76.5	84.8	79.6	73.2	61.2	55.5
24	69.3	81.1	71.3	66.6	78.7	82.6	72.5	66.6	62.1	53.3
25	68.4	76.6	64.0	69.1	78.4	73.1	76.9	66.0	63.6	57.5
26	64.4	73.2	59.9	72.5	75.3	77.8	72.6	68.7	60.7	62.6
27	60.9	70.2	55.5	72.3	70.0	72.9	72.1	68.7	57.5	62.0
28	60.2	65.7	55.6	66.4	71.1	74.0	69.7	66.3	61.1	53.2
29	55.1	59.2	55.7	62.5	65.9	72.1	69.2	65.9	57.2	57.7
30	51.3	56.5	53.3	65.9	61.3	69.4	66.9	62.7	58.4	54.0
31	47.5	54.0	48.5	62.8	59.3	58.2	66.6	61.4	56.6	53.4
32	45.7	50.7	46.2	56.6	57.2	66.8	66.0	64.0	62.7	64.3
33	45.2	47.8	45.3	52.5	57.1	65.6	65.9	60.0	55.4	54.6
34	45.0	45.4	45.7	50.9	56.2	64.9	64.3	56.6	54.1	50.2
35	45.0	45.0	45.0	47.7	54.7	62.9	62.1	57.3	55.2	54.3
36	45.0	45.0	45.0	45.8	50.8	59.7	59.1	54.6	49.2	47.0
37	45.0	45.0	45.0	45.0	48.2	55.6	55.9	52.4	46.7	45.1
38	45.0	45.0	45.0	45.0	45.3	52.6	54.1	50.9	45.0	45.0
39	45.0	45.0	45.0	45.0	45.0	50.2	55.4	53.9	45.0	45.0
40	45.0	45.0	45.0	45.0	45.0	47.7	54.8	53.2	45.0	45.0
A	69.3	80.4	72.8	76.3	78.0	81.2	78.8	74.0	69.2	68.1
D	78.7	89.1	82.4	84.4	84.4	87.3	85.3	79.6	75.1	73.9
OASPL	86.6	94.6	90.0	92.3	92.1	91.8	90.2	85.5	81.5	78.4
PNL	85.4	94.7	88.1	91.5	91.9	95.5	93.0	87.2	82.9	82.4
PNLT	85.4	94.7	88.1	92.6	92.9	95.5	93.0	88.3	85.1	85.8

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 34, 99 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-19.0	-15.5	-12.0	-8.5	-5.0	-1.5	1.0	0	2.0	5.5	8.0
17	80.9	84.8	85.0	86.9	88.0	81.2	77.3	76.1	78.8	74.2	73.2
18	80.0	84.5	84.9	85.5	86.3	81.9	80.9	78.2	73.1	75.1	73.0
19	81.5	85.8	83.9	86.5	85.1	72.2	67.3	63.3	61.5	68.7	70.3
20	79.5	86.2	81.9	84.7	82.5	68.3	71.6	75.3	76.1	67.0	68.9
21	76.3	86.5	81.7	83.9	80.3	77.9	80.5	81.6	71.1	61.8	65.0
22	73.9	84.9	79.1	80.3	71.7	79.2	80.7	82.6	78.4	61.4	60.7
23	71.8	83.6	72.8	76.4	71.3	84.1	83.4	79.6	73.4	65.8	56.1
24	69.8	79.6	75.1	65.9	76.1	81.1	78.7	73.2	67.1	64.7	57.5
25	61.1	74.7	67.6	65.3	76.2	72.5	76.1	78.3	70.0	64.1	61.4
26	52.2	71.6	60.2	65.5	75.4	76.5	77.2	74.3	67.3	59.1	64.3
27	49.2	68.3	56.7	62.9	63.9	72.9	74.8	74.9	71.4	66.1	60.9
28	48.2	65.4	58.3	60.8	66.3	72.4	72.4	71.6	70.1	61.1	57.6
29	47.3	59.6	59.7	53.6	66.2	70.9	71.4	70.4	66.9	63.2	60.7
30	46.9	57.0	57.2	52.8	61.2	63.3	68.4	69.6	65.9	60.3	56.1
31	45.2	55.5	48.6	51.9	59.2	68.1	68.4	68.3	63.8	59.9	55.7
32	45.0	52.1	46.4	43.7	56.9	68.4	69.1	68.3	64.5	68.9	63.1
33	45.0	49.0	46.8	45.6	55.2	66.6	67.1	67.0	62.9	59.8	55.9
34	45.0	46.7	45.3	45.3	54.8	65.8	66.2	65.6	62.0	57.7	52.6
35	45.0	45.0	45.0	45.0	51.8	62.8	63.0	62.7	61.0	59.6	53.0
36	45.0	45.0	45.0	45.0	49.6	60.7	61.3	60.6	58.5	54.9	48.3
37	45.0	45.0	45.0	45.0	45.9	57.5	58.7	58.6	56.6	51.6	45.6
38	45.0	45.0	45.0	45.0	45.0	54.6	55.8	56.7	56.0	48.8	45.0
39	45.0	45.0	45.0	45.0	45.0	53.0	56.4	58.7	59.5	48.2	45.0
40	45.0	45.0	45.0	45.0	45.0	50.9	54.6	59.3	59.9	45.8	45.0
A	68.2	79.2	73.8	74.1	76.9	81.1	81.5	80.9	76.8	73.0	68.8
D	79.1	87.7	83.4	84.5	84.5	87.2	87.4	86.6	82.5	79.0	74.6
OASPL	87.3	93.7	91.1	92.8	93.0	91.8	91.3	90.7	88.2	82.8	80.9
PNL	85.1	93.5	89.3	90.4	91.4	95.3	95.4	94.3	90.4	87.2	82.8
PNLT	85.1	93.5	89.3	90.4	91.4	95.3	95.4	94.3	90.4	90.2	85.3

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 35, 110 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-18.0	-14.0	-10.0	-6.0	-2.0	0	2.0	6.0	10.0	10.5
17	82.4	88.1	88.2	88.7	85.3	80.1	79.9	76.9	79.6	77.7
18	80.6	87.1	85.5	88.4	85.8	79.1	79.2	79.0	81.8	80.7
19	81.5	87.9	85.8	87.8	79.5	68.9	70.3	75.4	82.2	81.5
20	79.9	87.4	84.3	85.8	72.9	76.2	74.4	72.5	76.8	76.3
21	80.6	88.1	85.2	84.6	77.7	82.0	74.3	68.2	68.2	67.6
22	78.0	85.4	83.5	80.0	79.6	83.2	78.8	66.5	70.9	70.1
23	76.6	83.9	83.1	78.2	85.8	80.0	76.1	66.5	67.4	68.2
24	72.9	80.0	78.7	75.8	84.5	73.5	69.5	69.1	64.3	65.3
25	69.3	73.7	70.0	75.4	77.4	78.2	72.0	67.9	62.4	62.3
26	62.7	73.8	68.0	75.3	80.2	74.0	70.8	65.0	61.3	61.0
27	57.0	71.0	64.2	72.0	77.7	74.9	71.9	62.0	63.5	62.5
28	54.3	66.6	63.9	63.9	75.1	72.8	69.7	65.9	60.0	60.1
29	50.8	63.4	61.9	66.0	74.3	73.8	69.3	62.4	56.1	55.0
30	48.1	61.0	58.8	60.2	72.3	71.5	67.0	63.5	57.8	57.4
31	46.4	58.0	58.4	58.8	70.2	70.6	65.2	61.6	54.3	54.0
32	45.0	54.2	54.3	56.8	68.9	69.6	66.5	67.5	60.8	61.0
33	45.0	51.3	49.5	53.1	66.7	69.2	64.5	60.1	53.6	52.4
34	45.0	47.1	48.4	51.9	67.4	68.4	62.4	58.2	52.1	51.0
35	45.0	45.0	45.3	48.0	64.8	66.3	61.1	57.9	51.6	50.3
36	45.0	45.0	45.0	45.7	61.7	63.0	58.5	52.1	46.0	45.8
37	45.0	45.0	45.0	45.0	57.3	60.5	56.8	49.7	45.0	45.0
38	45.0	45.0	45.0	45.0	55.1	58.0	55.4	46.1	45.0	45.0
39	45.0	45.0	45.0	45.0	52.2	59.9	58.8	45.9	45.0	45.0
40	45.0	45.0	45.0	45.0	49.6	61.3	59.4	45.0	45.0	45.0
A	72.2	79.9	77.9	78.2	83.5	81.8	77.6	73.8	69.5	69.1
D	81.7	89.0	86.8	86.7	89.3	87.7	83.6	79.6	78.4	77.8
OASPL	88.8	95.5	93.8	94.7	94.0	91.8	89.8	85.8	86.6	85.8
PNL	87.6	95.0	93.0	93.3	97.6	95.6	91.5	87.7	86.0	85.3
PNLT	87.6	95.0	93.0	94.6	97.6	95.6	91.5	90.0	88.3	87.9

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 36, 110 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-17.5	-14.5	-11.5	-8.5	-5.5	-2.5	0	.5	3.5	4.5
17	83.0	84.4	85.4	87.3	89.6	89.7	75.2	75.5	72.7	73.7
18	83.9	85.2	84.7	86.4	88.5	88.8	78.4	75.7	77.2	76.8
19	83.6	84.9	86.2	87.2	89.0	86.1	63.6	61.6	68.4	71.0
20	83.8	84.2	85.7	86.8	86.5	79.7	76.4	78.1	62.6	66.0
21	82.9	85.1	85.5	86.9	85.4	76.3	82.6	80.8	63.7	61.4
22	80.9	83.0	83.5	83.5	79.7	79.3	83.6	83.9	71.4	67.3
23	77.6	82.0	81.3	82.9	75.2	85.6	79.8	76.9	72.8	70.4
24	72.2	78.5	76.3	75.2	75.4	86.8	74.2	73.4	70.0	69.1
25	68.6	73.8	68.8	70.5	74.8	84.2	78.5	76.8	64.3	66.1
26	66.4	70.5	66.2	69.3	77.2	80.4	74.6	72.1	69.1	64.0
27	60.9	66.2	61.4	67.6	75.7	79.4	75.2	72.1	69.6	70.0
28	54.8	63.4	56.1	66.8	68.6	76.8	72.7	71.6	68.1	65.5
29	53.5	55.6	55.5	65.2	67.7	75.5	72.2	71.4	67.3	67.6
30	50.9	52.7	54.8	58.1	68.2	72.0	70.6	69.4	64.7	65.5
31	50.4	51.5	52.6	60.5	65.6	70.5	70.0	69.0	64.0	64.5
32	47.2	49.7	47.7	55.1	61.8	69.1	69.6	68.8	69.7	68.2
33	46.2	46.4	46.4	52.0	58.2	67.5	69.5	68.5	63.1	62.5
34	45.0	46.3	45.6	50.8	55.5	67.4	67.6	66.2	59.5	60.5
35	45.0	45.0	45.0	46.3	51.0	65.9	65.1	64.2	60.7	61.1
36	45.0	45.0	45.0	45.0	48.5	63.1	62.2	61.5	55.8	56.1
37	45.0	45.0	45.0	45.0	45.0	59.2	60.4	59.6	53.2	53.4
38	45.0	45.0	45.0	45.0	45.0	55.2	58.8	58.3	51.2	50.3
39	45.0	45.0	45.0	45.0	45.0	51.5	59.5	60.1	53.5	50.2
40	45.0	45.0	45.0	45.0	45.0	50.2	61.0	62.3	52.2	47.2
A	74.2	77.6	76.5	78.2	79.5	85.6	81.9	80.5	76.4	75.4
D	83.8	86.4	86.1	87.2	87.5	91.4	88.0	86.8	81.5	80.5
OASPL	90.8	92.7	93.0	94.3	95.5	96.1	90.9	90.1	86.2	85.3
PNL	89.6	92.1	91.8	93.8	94.7	99.5	95.4	94.7	89.7	88.7
PNLT	89.6	92.1	91.8	95.1	94.7	99.5	95.4	94.7	91.7	90.2

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0



# TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 37, 114 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-14.5	-12.0	-9.5	-7.0	-4.5	-2.0	-1.0	0	.5	3.0	4.5
17	84.0	87.9	86.0	89.1	91.3	90.3	87.7	81.8	79.7	75.5	73.8
18	81.7	87.4	86.0	89.2	90.1	86.9	86.2	83.3	79.8	80.0	78.0
19	79.2	88.7	86.6	89.7	88.8	81.6	73.1	66.5	66.2	70.8	73.3
20	83.4	89.2	87.7	89.8	86.8	75.2	74.1	77.6	78.7	67.2	70.7
21	84.0	89.3	88.6	89.3	85.4	79.2	84.4	83.5	81.0	70.3	66.1
22	80.7	87.7	88.0	86.5	78.3	84.0	86.6	84.3	82.8	76.1	66.3
23	76.1	85.4	86.7	83.0	78.7	87.3	89.4	82.8	77.4	76.6	70.9
24	72.2	81.4	80.5	77.1	81.7	85.8	83.6	75.7	73.8	71.3	70.7
25	71.9	76.2	75.0	79.2	80.1	78.6	82.6	80.9	77.4	65.4	68.2
26	69.5	78.6	77.3	77.1	81.9	79.2	82.5	77.1	72.5	70.2	63.5
27	67.8	77.9	75.5	74.3	78.0	78.2	78.2	76.5	73.7	68.6	66.3
28	58.7	73.9	69.9	72.9	72.1	75.8	76.3	73.7	71.6	66.9	64.9
29	60.5	71.3	67.7	67.0	73.7	73.5	74.4	73.9	72.0	66.9	63.3
30	53.9	68.1	64.8	62.1	69.5	71.5	72.0	71.3	70.2	65.1	62.5
31	51.8	65.4	62.7	61.2	70.4	70.9	70.9	70.1	69.1	63.7	61.1
32	51.3	59.8	56.7	60.9	68.2	69.1	70.2	70.7	69.8	67.2	67.9
33	47.6	56.1	55.8	56.4	64.7	67.7	69.9	69.4	68.1	62.1	59.7
34	45.6	51.4	50.0	50.6	61.9	67.8	69.3	68.6	66.9	59.9	58.0
35	45.0	48.4	46.8	47.3	58.6	65.0	66.3	66.1	65.0	59.2	58.7
36	45.0	46.8	45.0	45.2	54.1	59.9	63.0	62.5	61.1	56.5	53.8
37	45.0	45.4	45.0	45.0	50.2	57.1	60.3	59.9	58.9	53.5	51.9
38	45.0	45.0	45.0	45.0	46.3	54.1	57.5	57.7	57.7	52.8	48.7
39	45.0	45.0	45.0	45.0	45.0	50.9	56.6	59.5	59.9	56.0	49.1
40	45.0	45.0	45.0	45.0	45.0	47.8	54.3	59.9	61.2	54.5	46.5
A	74.6	83.3	82.5	82.0	83.3	84.6	85.5	82.9	80.6	76.1	73.7
D	83.8	90.9	90.5	90.3	89.9	90.9	91.7	89.3	87.1	81.9	79.7
OASPL	90.4	96.5	95.6	97.0	96.6	95.8	95.8	92.9	91.2	87.3	84.8
PNL	90.4	97.3	96.5	96.7	97.5	98.8	100.2	96.7	94.8	89.8	88.0
PNLT	91.8	97.3	96.5	96.7	97.5	98.8	100.2	96.7	94.8	91.2	90.5

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 38, 114 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-16.0	-13.5	-11.0	-8.5	-6.0	-3.5	-1.0	0	1.5	4.0
17	82.4	89.0	89.6	90.5	91.8	94.3	88.9	80.1	75.6	73.0
18	81.3	90.4	90.6	91.0	91.5	93.1	86.1	80.1	73.1	73.6
19	81.1	90.6	91.5	92.1	92.0	92.6	78.7	65.0	63.3	67.3
20	80.2	90.8	91.5	92.1	90.8	89.2	72.0	75.5	76.7	64.9
21	78.7	92.2	92.3	92.6	91.2	87.8	81.3	83.4	72.2	59.6
22	79.5	90.2	91.8	91.8	89.5	80.6	82.0	84.0	79.6	64.5
23	77.9	89.0	90.4	91.1	88.3	80.8	87.2	82.5	74.6	69.5
24	76.0	86.9	86.6	87.4	81.8	85.0	83.8	75.1	70.0	69.2
25	70.8	83.4	80.6	80.3	70.4	85.2	77.9	78.9	73.7	67.2
26	66.5	80.3	75.3	73.1	66.7	83.3	80.3	76.6	71.7	64.9
27	64.0	76.0	71.8	69.1	70.2	76.9	77.8	76.3	74.1	69.7
28	59.8	73.0	67.4	69.1	70.2	73.0	75.6	74.0	70.8	66.6
29	56.1	64.7	64.1	69.1	67.9	70.0	75.0	73.6	71.3	66.6
30	55.0	60.1	60.0	69.5	61.7	65.8	73.7	71.2	69.7	65.0
31	55.0	57.3	58.4	64.4	58.7	63.2	73.5	71.9	68.5	65.2
32	55.0	56.7	55.6	61.0	56.1	61.7	72.3	71.7	68.8	70.4
33	55.0	55.0	55.0	58.1	55.0	60.4	70.2	70.1	67.9	65.5
34	55.0	55.0	55.0	55.5	55.0	60.9	70.1	68.3	66.5	64.0
35	55.0	55.0	55.0	55.0	55.0	58.7	67.7	65.5	65.3	63.4
36	55.0	55.0	55.0	55.0	55.0	57.1	64.8	63.6	63.1	59.8
37	55.0	55.0	55.0	55.0	55.0	55.0	61.8	60.8	61.1	56.6
38	55.0	55.0	55.0	55.0	55.0	55.0	59.8	59.9	60.1	55.5
39	55.0	55.0	55.0	55.0	55.0	55.0	58.9	61.7	62.6	56.0
40	55.0	55.0	55.0	55.0	55.0	55.0	58.0	62.9	64.5	55.2
A	73.0	85.5	85.1	85.2	82.5	84.7	85.2	83.5	79.9	76.2
D	83.0	93.9	94.0	94.3	92.3	92.0	90.9	88.4	85.4	81.9
OASPL	89.1	98.8	99.4	99.9	99.2	99.3	95.5	92.2	88.3	83.7
PNL	90.3	99.8	100.0	100.7	98.4	99.1	99.4	96.6	93.5	90.3
PNLT	90.3	99.8	100.0	100.7	98.4	99.1	99.4	96.6	93.5	92.0

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 43, 3 DEGREE APPROACH, CENTERLINE MIC. ( SOFT SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-46.0	-38.0	-30.0	-22.0	-14.0	-6.0	-2.5	0	2.0	10.0	10.5
17	76.9	78.8	78.0	80.8	83.7	84.3	82.8	79.1	81.8	77.1	76.8
18	78.9	79.4	77.3	81.4	84.2	84.7	82.6	75.9	75.9	73.9	74.1
19	76.9	74.6	73.8	78.4	80.0	75.9	68.2	64.6	67.7	69.4	69.7
20	76.5	72.3	71.6	78.4	77.7	70.7	70.3	76.5	79.6	70.5	70.9
21	75.5	72.5	71.1	79.1	77.4	69.0	79.2	79.9	78.2	67.4	67.1
22	75.0	67.2	71.7	76.4	75.1	77.8	83.6	81.6	82.1	63.9	64.5
23	77.3	67.6	71.0	75.0	71.3	82.5	84.9	75.2	74.9	71.7	69.1
24	74.0	66.5	68.1	69.2	67.0	84.2	79.1	73.1	73.1	75.0	73.0
25	72.0	64.6	66.4	63.4	72.8	78.5	78.9	76.7	74.9	74.5	72.9
26	67.8	60.6	62.1	60.9	76.6	71.5	77.6	72.5	70.8	68.5	66.8
27	64.9	61.3	52.0	56.9	74.8	75.3	74.8	73.4	71.9	59.3	59.0
28	57.3	53.2	51.2	54.7	65.0	70.0	73.7	71.5	70.2	64.6	61.3
29	52.2	50.2	51.6	54.5	65.3	71.5	71.8	69.7	68.5	60.6	60.1
30	52.0	52.7	52.7	53.9	66.9	68.8	71.1	69.4	67.2	60.4	58.9
31	53.4	48.4	48.6	47.0	64.4	68.2	72.0	69.0	66.0	58.3	57.2
32	50.4	45.4	45.2	46.9	62.1	68.2	71.5	67.9	66.5	61.0	60.4
33	46.4	45.0	45.3	45.9	60.2	67.1	70.3	65.9	66.1	59.5	59.2
34	45.0	45.0	45.0	45.2	55.6	65.4	67.7	64.3	64.2	55.7	54.5
35	45.0	45.0	45.0	45.0	51.9	61.9	64.2	62.6	61.9	54.2	53.0
36	45.0	45.0	45.0	45.0	47.9	57.9	62.2	61.3	60.0	51.8	51.0
37	45.0	45.0	45.0	45.0	45.0	55.0	59.7	58.2	57.4	48.8	47.9
38	45.0	45.0	45.0	45.0	45.0	50.5	56.2	56.5	56.7	45.8	45.6
39	45.0	45.0	45.0	45.0	45.0	48.1	56.4	59.5	59.9	45.0	45.0
40	45.0	45.0	45.0	45.0	45.0	49.4	55.8	62.6	63.4	45.0	45.0
A	72.4	65.9	67.3	70.0	76.4	81.0	82.9	80.1	78.5	73.5	71.8
D	80.2	74.7	75.6	79.5	82.7	87.4	88.8	86.0	85.1	79.9	78.6
OASPL	85.4	83.8	83.6	87.4	89.5	92.5	93.8	93.1	92.8	85.3	84.6
PNL	87.2	81.9	82.4	86.2	91.0	95.6	96.9	93.5	93.3	87.2	85.9
PNLT	87.2	83.0	82.4	86.2	91.0	95.6	96.9	93.5	93.3	88.7	85.9

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 44, 110 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-17.5	-14.5	-11.5	-8.5	-5.5	-2.5	0	.5	3.5	6.5
17	81.7	85.0	86.2	86.9	90.3	91.3	78.7	76.6	75.7	74.3
18	80.7	85.6	86.9	86.2	89.4	87.9	78.0	75.1	78.2	73.8
19	79.9	85.0	88.1	86.5	89.4	86.5	64.3	61.3	69.1	70.9
20	79.6	85.4	87.9	85.8	87.0	81.3	74.3	77.0	63.6	70.0
21	79.8	86.9	88.2	86.0	86.4	76.3	79.9	78.7	64.9	63.7
22	77.8	87.7	85.8	84.2	81.3	77.6	80.3	80.9	72.0	58.5
23	79.8	86.1	82.9	81.6	76.8	85.3	78.3	75.6	73.3	57.5
24	77.4	80.5	78.2	73.2	76.0	87.2	72.5	69.6	71.1	61.8
25	74.0	73.3	71.8	67.8	76.5	84.4	75.4	73.8	65.8	65.2
26	70.3	72.7	71.4	67.7	73.4	79.5	74.2	70.9	69.3	65.6
27	66.5	70.4	68.2	64.4	71.9	78.3	75.4	73.3	69.2	61.7
28	60.0	66.4	63.1	62.5	65.1	77.4	74.2	73.5	68.4	62.2
29	54.0	62.0	58.0	59.0	60.2	75.1	73.4	72.9	66.0	62.5
30	51.5	56.2	56.1	53.1	60.2	72.0	71.4	71.2	65.5	59.9
31	49.9	55.8	54.9	54.3	56.3	71.2	71.6	71.2	64.1	59.5
32	47.5	49.9	54.0	50.4	55.1	70.2	71.0	70.7	68.2	69.6
33	45.0	48.4	51.1	50.1	52.3	68.5	69.0	68.4	62.6	60.3
34	45.0	45.2	50.7	47.4	51.4	67.2	67.9	67.5	60.8	57.3
35	45.0	45.0	46.4	45.1	48.1	63.8	67.0	66.6	59.6	57.0
36	45.0	45.0	45.0	45.0	47.4	60.8	64.7	64.2	56.1	51.9
37	45.0	45.0	45.0	45.0	45.5	57.6	62.7	62.4	54.6	50.0
38	45.0	45.0	45.0	45.0	45.0	55.3	59.5	59.9	52.6	46.0
39	45.0	45.0	45.0	45.0	45.0	49.4	60.6	61.4	55.4	45.3
40	45.0	45.0	45.0	45.0	45.0	48.9	61.4	63.5	54.1	45.0
A	75.3	80.6	79.3	76.9	78.5	85.5	81.8	81.1	75.9	73.0
D	83.2	89.0	88.6	86.6	87.8	91.5	87.1	86.7	81.3	78.7
OASPL	88.8	94.3	95.1	93.7	95.9	96.3	89.9	89.3	86.3	82.1
PNL	89.6	94.9	94.5	92.5	94.1	99.5	95.2	94.5	89.5	87.0
PNLT	89.6	94.9	94.5	92.5	94.1	99.5	95.2	94.5	91.1	90.3

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 45, 110 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-21.5	-17.5	-13.5	-9.5	-5.5	-1.5	0	2.5	6.5	9.5
17	79.7	78.6	82.3	85.2	88.1	86.3	78.8	73.1	68.3	68.4
18	78.9	80.3	81.5	85.5	87.2	83.5	80.1	67.8	73.2	71.0
19	79.2	81.7	82.1	87.1	87.0	78.4	66.1	63.5	67.9	68.4
20	75.7	81.2	83.1	86.0	84.6	68.8	70.4	75.8	64.4	67.5
21	74.2	82.8	84.0	85.9	82.6	73.3	80.9	71.3	64.0	63.1
22	74.3	81.6	82.1	84.4	77.5	75.8	80.5	79.1	64.2	61.3
23	73.8	80.2	82.4	82.9	72.5	83.8	83.6	70.0	67.9	59.9
24	71.0	76.4	79.0	78.1	67.6	81.6	77.1	68.3	67.1	63.1
25	64.7	71.1	72.4	72.7	68.1	70.8	76.7	71.2	62.2	62.1
26	59.8	68.0	70.2	68.0	65.5	72.5	76.3	68.7	62.9	64.0
27	52.6	63.9	66.8	66.6	61.0	70.6	72.4	70.0	65.6	58.8
28	51.2	60.0	59.8	59.2	55.9	69.0	70.7	68.4	62.1	60.2
29	50.0	56.1	57.6	57.8	53.6	68.5	69.6	68.2	61.7	59.2
30	50.0	52.9	53.4	56.8	54.8	65.9	67.9	66.5	60.4	57.7
31	50.0	50.2	51.9	53.4	52.9	66.2	68.0	65.6	58.8	55.3
32	50.0	50.0	50.0	52.4	52.1	65.7	66.3	65.3	64.6	62.2
33	50.0	50.0	50.0	50.7	50.6	65.6	65.6	64.2	57.4	54.5
34	50.0	50.0	50.0	50.3	50.0	63.6	65.9	62.6	54.6	53.4
35	50.0	50.0	50.0	50.0	50.0	60.0	63.2	61.1	54.8	53.5
36	50.0	50.0	50.0	50.0	50.0	57.9	60.0	59.0	50.9	50.0
37	50.0	50.0	50.0	50.0	50.0	54.6	56.1	55.9	50.0	50.0
38	50.0	50.0	50.0	50.0	50.0	52.3	53.3	54.1	50.0	50.0
39	50.0	50.0	50.0	50.0	50.0	50.0	52.3	55.7	50.0	50.0
40	50.0	50.0	50.0	50.0	50.0	50.0	50.6	55.4	50.0	50.0
A	67.5	75.3	76.9	77.7	72.7	79.3	80.7	76.6	70.8	68.3
D	77.9	83.9	85.4	87.1	83.8	86.0	86.5	82.6	76.1	73.8
OASPL	85.1	89.5	91.1	93.5	93.2	91.8	90.1	85.5	81.5	79.0
PNL	85.4	90.5	92.1	93.3	90.9	94.2	94.8	90.3	85.0	82.9
PNLT	85.4	90.5	92.1	93.3	90.9	94.2	94.8	90.3	87.2	85.4

LOWER LIMIT OF ANALYSIS SYSTEM= 50.0

TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 46, 114 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-14.5	-12.5	-12.0	-9.5	-7.0	-4.5	-2.0	0	.5	3.0	5.0
17	82.6	88.7	88.4	89.6	91.2	92.6	90.9	77.6	76.0	72.5	68.8
18	83.5	88.8	88.8	89.2	90.8	91.5	88.1	79.3	76.8	65.7	67.9
19	83.1	89.1	89.2	89.1	91.4	91.2	84.8	64.2	63.1	62.7	64.2
20	81.4	90.5	90.9	88.6	90.4	89.1	77.3	75.9	77.5	68.1	63.8
21	80.8	91.6	92.2	89.1	90.1	87.5	74.8	82.2	81.3	67.1	61.3
22	79.0	90.8	91.3	87.5	87.9	81.4	79.7	82.7	83.3	72.4	63.6
23	73.5	89.9	89.8	86.1	85.8	75.0	85.3	82.1	77.6	72.8	68.0
24	71.0	87.7	87.7	83.0	78.4	78.2	84.5	75.6	73.9	67.9	68.0
25	68.1	84.3	83.9	76.6	70.4	78.4	79.2	78.2	77.8	70.1	65.2
26	65.5	82.2	81.5	70.6	72.7	77.9	76.6	75.1	73.0	70.9	64.0
27	61.3	80.3	78.5	64.6	74.3	73.9	76.6	75.2	74.5	69.9	68.7
28	60.0	77.3	75.4	65.0	72.8	65.3	73.4	71.8	71.1	68.9	65.6
29	60.0	73.1	71.3	63.7	66.4	66.4	72.1	71.2	71.1	71.2	66.2
30	60.0	70.9	69.2	61.6	61.9	60.8	69.8	70.1	69.8	68.6	66.2
31	60.0	67.7	66.5	60.0	61.7	60.2	67.4	69.5	68.6	67.3	65.3
32	60.0	63.2	62.7	60.0	60.0	60.5	66.6	69.4	68.4	69.5	69.2
33	60.0	60.4	60.3	60.0	60.0	60.0	64.7	67.9	67.3	64.6	62.7
34	60.0	60.0	60.0	60.0	60.0	60.0	64.5	68.1	67.4	62.0	62.0
35	60.0	60.0	60.0	60.0	60.0	60.0	62.7	65.4	65.1	61.4	60.9
36	60.0	60.0	60.0	60.0	60.0	60.0	60.9	63.8	63.8	60.1	60.0
37	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.6	60.5	60.0	60.0
38	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
39	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
40	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.1	60.8	60.0	60.0
A	72.1	87.2	86.8	81.7	81.6	80.2	83.2	81.7	81.1	77.8	75.3
D	81.6	94.3	94.0	89.8	90.5	89.0	88.9	87.5	86.7	82.6	80.2
OASPL	89.9	98.8	98.7	96.5	97.9	97.6	95.5	91.3	89.9	83.5	80.9
PNL	91.4	101.4	101.2	97.6	98.5	97.3	97.7	95.7	94.9	91.1	89.5
PNLT	91.4	101.4	101.2	97.6	98.5	98.4	97.7	95.7	94.9	92.3	91.3

LOWER LIMIT OF ANALYSIS SYSTEM= 60.0

# TABLE E-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 47, 114 KT. FLY BY, CENTERLINE MIC. (SOFT SIT)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-17.5	-14.5	-11.5	-8.5	-5.5	-2.5	0	.5	3.5	5.0
17	84.2	83.5	85.9	86.9	90.4	91.8	78.2	77.3	74.2	71.9
18	82.8	84.9	87.1	86.7	90.4	88.7	79.3	76.5	74.9	72.7
19	82.2	85.7	87.3	86.5	89.6	86.2	65.8	64.7	67.6	68.5
20	82.3	86.3	87.6	85.0	88.4	81.6	75.3	77.3	65.3	67.9
21	82.1	86.2	87.5	85.2	88.0	78.7	81.6	79.8	64.4	65.1
22	79.6	86.4	85.7	84.1	84.2	80.4	81.9	81.8	71.8	64.7
23	76.5	85.9	83.3	82.1	79.5	84.7	79.3	75.5	72.6	67.5
24	69.5	82.9	78.2	75.4	77.7	85.2	72.4	71.6	70.5	67.0
25	62.7	77.5	72.5	66.7	78.6	81.6	76.3	75.3	64.6	64.7
26	59.5	73.7	70.5	67.7	75.9	77.0	73.6	69.9	69.6	60.9
27	58.2	72.4	67.8	64.0	73.0	78.0	73.2	70.5	68.0	66.1
28	54.0	67.9	61.8	60.5	68.7	75.4	71.5	70.8	66.7	63.7
29	47.7	63.4	54.9	57.2	61.9	73.1	70.9	69.8	66.8	62.6
30	47.0	57.6	53.8	52.8	58.4	69.1	69.9	68.9	65.1	60.9
31	45.3	53.4	50.1	48.5	56.4	69.0	70.1	69.2	63.7	60.6
32	45.0	47.6	46.3	49.6	54.9	67.0	70.3	69.2	70.1	66.3
33	45.0	45.9	45.2	47.1	52.4	64.4	68.6	67.7	62.5	58.4
34	45.0	45.0	45.0	46.8	51.2	63.8	66.6	65.7	60.7	56.3
35	45.0	45.0	45.0	45.0	48.0	60.4	64.5	63.7	59.9	58.2
36	45.0	45.0	45.0	45.0	45.5	58.2	63.2	62.0	56.2	53.3
37	45.0	45.0	45.0	45.0	45.0	54.7	60.6	59.7	53.7	50.2
38	45.0	45.0	45.0	45.0	45.0	51.4	57.6	57.2	51.6	47.0
39	45.0	45.0	45.0	45.0	45.0	48.1	58.4	58.8	53.7	46.9
40	45.0	45.0	45.0	45.0	45.0	46.7	58.6	60.2	50.5	45.1
A	72.2	81.1	79.1	76.8	80.2	83.3	80.9	79.7	76.1	72.0
D	82.6	89.1	88.4	86.5	89.2	89.9	86.9	85.9	81.4	77.6
OASPL	89.9	94.3	94.7	93.7	96.7	96.8	90.6	89.4	84.0	81.6
PNL	88.3	95.0	93.8	92.0	95.5	98.0	94.4	93.6	89.8	86.1
PNLT	88.3	95.0	93.8	92.0	95.5	98.0	94.4	93.6	92.1	88.4

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE E-VII

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 1, 0 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	72.4	74.5	68.6	72.1	1.8
15	81.9	84.0	77.6	81.5	1.9
16	78.6	80.7	74.4	78.3	1.9
17	79.0	81.6	74.1	78.5	2.2
18	77.2	79.9	72.4	76.8	2.2
19	75.3	78.2	70.9	74.9	1.9
20	75.3	78.4	67.6	74.5	2.8
21	73.9	77.6	66.4	73.2	2.7
22	76.6	78.4	73.0	76.3	1.5
23	75.5	77.8	72.4	75.3	1.6
24	75.9	78.8	73.5	75.7	1.3
25	76.0	80.5	72.7	75.5	1.9
26	74.7	78.9	70.7	74.2	2.1
27	72.7	77.2	69.0	72.1	2.2
28	68.3	72.2	64.6	67.8	2.1
29	62.2	64.9	58.9	61.9	1.7
30	58.0	61.0	53.9	57.6	2.1
31	58.4	60.9	53.1	57.9	2.3
32	58.4	61.2	53.0	57.8	2.4
33	57.4	60.7	52.3	56.8	2.3
34	55.2	58.6	49.7	54.6	2.4
35	52.7	54.8	48.1	52.3	1.9
36	51.7	54.0	47.5	51.4	1.6
37	47.5	49.7	45.1	47.3	1.1
38	45.5	47.0	45.0	45.5	.5
39	45.4	46.4	45.0	45.4	.4
40	46.0	47.9	45.1	45.9	.8
DBA	76.9	80.4	74.1	76.6	1.7
DBD	83.1	86.0	80.8	82.9	1.3
OASPL	88.4	89.4	87.3	88.4	.6
PNL	90.0	92.9	87.1	89.8	1.4
PNLT	90.2	92.9	87.1	89.9	1.5

270°  
(Microphone Location  
Relative to Helicopter)



TABLE E-VII  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 2, 45 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	75.4	76.8	71.0	75.2	1.5
15	84.7	86.1	79.2	84.4	1.8
16	81.5	83.1	75.2	81.1	2.1
17	86.0	88.4	78.7	85.6	2.1
18	83.2	85.2	74.2	82.8	2.4
19	79.3	81.4	69.5	78.5	3.2
20	80.4	84.4	75.2	79.9	2.0
21	78.1	80.3	72.0	77.8	2.0
22	79.4	81.3	76.2	79.3	1.1
23	78.0	80.9	76.0	77.8	1.3
24	79.1	82.2	76.9	78.8	1.6
25	79.3	81.8	75.8	79.0	1.7
26	79.2	82.8	74.0	78.7	2.1
27	78.0	82.9	72.3	77.3	2.5
28	74.7	80.1	66.8	73.7	3.0
29	69.5	72.5	59.1	68.4	3.5
30	65.0	67.7	56.5	64.4	2.5
31	65.8	68.1	57.2	65.3	2.4
32	65.8	68.5	56.9	65.2	2.8
33	65.0	67.7	57.8	64.5	2.4
34	61.3	64.6	54.3	60.8	2.4
35	58.3	60.4	52.8	58.0	1.9
36	56.0	58.0	51.6	55.7	1.6
37	51.9	54.0	48.0	51.7	1.5
38	48.7	51.1	46.8	48.6	1.1
39	47.0	48.7	45.5	46.9	.7
40	46.4	47.8	45.1	46.4	.7
DBA	81.7	85.3	77.2	81.3	1.9
DBD	87.3	89.9	84.5	87.1	1.4
OASPL	91.8	93.1	90.6	91.8	.7
PNL	94.7	97.3	91.3	94.5	1.4
PNLT	94.7	97.3	91.3	94.5	1.4

225°  
(Microphone Location  
Relative to Helicopter)

# TABLE E-VII

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 3, 90 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	75.2	76.4	74.2	75.2	.5
15	84.1	85.4	82.9	84.0	.6
16	81.3	82.8	80.3	81.2	.7
17	85.7	87.0	84.7	85.7	.6
18	83.0	85.0	81.5	82.9	.8
19	79.0	82.1	74.9	78.7	1.7
20	81.9	83.3	80.1	81.8	.9
21	78.6	79.8	76.7	78.5	.9
22	78.9	80.8	73.8	78.6	1.6
23	75.9	79.8	71.4	75.6	1.7
24	76.6	80.6	70.8	76.1	2.1
25	76.0	80.2	69.7	75.4	2.5
26	74.2	78.2	67.9	73.5	2.5
27	68.9	72.6	63.0	68.4	2.3
28	65.9	71.3	60.7	65.1	2.4
29	64.2	68.8	60.3	63.5	2.4
30	58.2	64.8	52.9	56.6	3.3
31	56.0	62.0	50.5	54.7	3.1
32	55.4	61.8	50.6	54.0	3.2
33	54.4	60.2	49.9	53.3	2.9
34	52.4	57.0	47.9	51.5	2.7
35	50.5	54.9	46.0	49.9	2.3
36	48.5	52.5	45.0	48.1	1.8
37	46.3	50.3	45.0	46.1	1.4
38	45.2	46.3	45.0	45.2	.3
39	45.2	46.0	45.0	45.2	.3
40	45.0	45.0	45.0	45.0	.0
DBA	76.9	80.0	73.2	76.6	1.6
DBD	84.0	86.9	81.7	83.8	1.2
OASPL	90.7	92.3	89.8	90.7	.6
PNL	90.7	93.8	88.4	90.4	1.3
PNLT	90.9	93.8	88.4	90.7	1.4

180°

(Microphone Location  
Relative to Helicopter)

# TABLE E-III

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 4, 135 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	75.2	76.6	73.2	75.2	.7
15	84.5	85.5	83.5	84.4	.5
16	81.6	82.8	80.6	81.6	.5
17	84.1	84.8	83.3	84.1	.4
18	81.5	82.5	79.9	81.5	.7
19	77.4	80.1	70.2	76.9	2.2
20	76.3	77.7	72.7	76.1	1.2
21	73.9	76.0	71.7	73.8	1.1
22	74.6	75.7	72.6	74.5	.8
23	73.9	75.8	70.9	73.7	1.3
24	74.0	76.7	71.5	73.8	1.4
25	74.3	77.1	71.7	74.1	1.4
26	73.5	76.2	70.6	73.3	1.5
27	71.7	74.1	68.3	71.3	1.7
28	68.6	71.6	63.8	68.1	2.1
29	64.9	67.7	59.8	64.5	2.1
30	59.6	63.1	55.1	59.2	1.9
31	58.0	61.6	50.1	57.6	2.0
32	58.0	61.3	52.9	57.5	2.1
33	58.0	60.7	54.8	57.7	1.4
34	54.6	57.6	51.3	54.3	1.7
35	52.0	54.7	48.9	51.7	1.8
36	50.2	53.0	47.4	49.9	1.7
37	47.7	50.1	45.9	47.5	1.4
38	46.3	48.2	45.2	46.2	.8
39	46.7	48.1	45.6	46.7	.6
40	46.2	48.0	45.4	46.2	.7
DBA	76.1	78.3	73.4	75.9	1.3
DBD	82.4	83.9	80.9	82.3	.8
OASPL	89.3	90.0	88.6	89.2	.3
PNL	89.4	91.1	87.5	89.3	1.0
PNLT	89.5	91.1	87.5	89.4	.9

135°  
(Microphone Location  
Relative to Helicopter)

# TABLE E-III

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 5, 180 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	75.8	76.5	75.1	75.8	.2
15	84.4	85.4	82.4	84.3	.7
16	81.5	82.8	78.8	81.3	1.0
17	81.4	83.1	78.9	81.3	1.0
18	79.6	81.7	77.7	79.5	1.0
19	78.0	81.3	75.7	77.8	1.4
20	73.9	77.2	70.2	73.5	1.8
21	71.6	75.3	68.4	71.2	1.8
22	73.1	74.7	70.4	73.0	1.0
23	72.4	74.8	69.4	72.2	1.3
24	73.6	75.9	70.5	73.4	1.2
25	72.1	74.3	70.0	71.9	1.2
26	70.7	72.4	68.1	70.6	1.1
27	68.9	71.0	66.9	68.7	1.2
28	66.4	68.7	63.9	66.3	1.0
29	64.1	66.0	61.7	64.0	1.2
30	58.8	61.5	56.6	58.6	1.3
31	55.7	58.6	53.0	55.4	1.4
32	55.5	57.9	53.2	55.3	1.4
33	55.7	57.4	52.8	55.5	1.2
34	54.2	56.7	50.8	54.0	1.4
35	51.3	52.9	49.0	51.1	1.2
36	49.4	51.0	47.2	49.3	1.0
37	46.4	47.9	45.0	46.3	.7
38	45.4	46.4	45.0	45.3	.4
39	45.8	46.6	45.0	45.7	.5
40	46.5	47.8	45.2	46.4	.7
DBA	74.0	75.6	72.8	74.0	.8
DBD	80.6	81.8	79.2	80.5	.7
OASPL	88.4	89.5	87.1	88.3	.6
PNL	87.6	89.0	86.2	87.5	.7
PNLT	87.6	89.0	86.2	87.5	.7

90°  
(Microphone Location  
Relative to Helicopt)

**TABLE E-VII**  
**5 FOOT HOVER TEST**  
**1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA**

BELL 212

OCTOBER 6, 1976

EVENT 6, 225 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
 (DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	76.9	77.8	76.3	76.9	.4
15	84.9	86.1	83.6	84.9	.7
16	81.6	83.0	79.5	81.5	.9
17	82.4	83.6	80.7	82.3	.9
18	80.9	82.6	78.8	80.8	.9
19	78.9	80.5	76.4	78.8	1.1
20	77.0	78.5	74.5	76.8	1.0
21	74.7	76.5	71.7	74.6	1.3
22	73.7	76.1	69.5	73.5	1.5
23	73.3	75.8	69.0	73.1	1.6
24	72.8	75.6	69.3	72.5	1.6
25	71.9	74.5	66.8	71.6	1.8
26	71.6	74.9	66.9	71.2	1.9
27	70.1	73.8	65.4	69.7	1.9
28	67.6	71.1	63.8	67.3	1.5
29	64.2	67.9	61.2	63.9	1.7
30	60.2	64.0	56.7	59.9	1.6
31	60.2	63.2	56.0	59.8	1.9
32	61.0	64.2	56.2	60.5	2.2
33	60.0	63.1	55.7	59.5	2.0
34	57.5	60.0	53.7	57.1	1.8
35	55.6	58.2	50.8	55.2	2.1
36	55.5	58.8	49.5	54.9	2.4
37	52.0	54.7	47.9	51.6	2.0
38	50.8	53.8	47.2	50.5	1.8
39	55.3	58.4	51.4	55.0	1.6
40	61.3	64.7	57.2	60.9	1.7
DBA	75.2	77.4	72.0	75.0	1.3
DEB	81.9	83.6	79.5	81.8	1.1
OASPL	89.3	90.5	88.2	89.2	.7
PNL	89.6	91.9	86.9	89.4	1.3
PNLT	89.6	91.9	86.9	89.4	1.3

45°  
 (Microphone Location  
 Relative to Helicopter)

# TABLE E-VII

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 1, 0 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	76.8	78.1	74.6	76.7	1.0
15	84.6	86.2	82.9	84.5	.9
16	81.7	84.1	79.2	81.5	1.4
17	80.8	84.3	76.6	80.3	2.1
18	77.7	81.5	72.3	77.0	2.6
19	77.2	82.4	73.5	76.6	2.3
20	79.4	83.2	74.5	78.9	2.0
21	81.2	84.9	77.2	80.8	2.1
22	82.6	86.4	77.8	81.8	2.5
23	84.4	85.4	78.3	83.6	2.6
24	84.5	86.2	78.7	83.9	2.5
25	83.3	85.1	76.2	82.9	2.1
26	82.5	85.4	74.5	81.9	2.6
27	79.9	83.1	72.9	79.3	2.5
28	77.3	80.5	71.5	76.7	2.3
29	74.1	76.2	69.5	73.8	1.6
30	71.1	72.9	68.0	70.8	1.6
31	69.3	71.2	66.3	69.0	1.5
32	66.7	67.7	65.0	66.6	.9
33	65.7	65.5	65.0	65.5	1.3
34	66.3	65.0	65.0	65.6	1.9
35	65.2	65.0	65.0	65.2	.5
36	65.0	65.0	65.0	65.0	.2
37	65.0	65.0	65.0	65.0	.0
38	65.0	65.0	65.0	65.0	.0
39	65.0	65.0	65.0	65.0	.0
40	65.0	65.0	65.0	65.0	.0
DBA	85.0	86.6	79.7	84.7	1.8
DBD	90.3	92.3	85.0	89.9	1.9
OASPL	93.2	94.9	90.7	93.1	1.1
PNL	98.7	102.1	94.6	98.5	1.5
PNLT	98.9	103.5	94.6	98.5	1.7

90°

(Microphone Location  
Relative to Helicopter)

# TABLE E-VII

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 2, 45 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	77.1	78.7	75.9	77.0	.8
15	84.4	85.4	83.2	84.3	.6
16	82.1	83.4	80.4	82.1	.6
17	82.1	83.3	80.3	82.0	.7
18	78.5	80.3	76.3	78.4	1.0
19	75.6	78.4	70.2	75.2	2.1
20	76.9	79.9	73.5	76.6	1.6
21	75.6	79.7	72.8	75.3	1.6
22	74.7	79.3	70.3	74.3	1.9
23	74.7	77.9	71.5	74.4	1.6
24	75.1	79.3	71.7	74.6	2.1
25	75.2	78.4	70.8	74.6	2.2
26	75.0	78.5	70.2	74.3	2.5
27	73.3	77.9	67.8	72.4	2.8
28	71.4	76.0	65.7	70.6	2.7
29	68.6	72.4	65.0	67.9	2.4
30	66.8	70.2	65.0	66.4	1.7
31	66.1	70.4	65.0	65.8	1.5
32	65.6	69.6	65.0	65.4	1.2
33	65.2	66.8	65.0	65.1	.5
34	65.0	65.5	65.0	65.0	.1
35	65.0	65.0	65.0	65.0	.0
36	65.0	65.0	65.0	65.0	.0
37	65.0	65.0	65.0	65.0	.0
38	65.0	65.0	65.0	65.0	.0
39	65.0	65.0	65.0	65.0	.0
40	65.0	65.0	65.0	65.0	.0
DBA	78.5	83.2	74.4	77.8	2.4
DED	84.1	87.4	81.5	83.8	1.6
OASPL	90.0	92.0	88.9	90.0	.7
PNL	94.0	96.3	92.8	93.9	.9
PNLT	94.0	96.3	92.8	93.9	.9

45°  
(Microphone Location  
Relative to Helicopter)

**TABLE E-VII**  
**5 FOOT HOVER TEST**  
**1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA**

BELL 212

OCTOBER 6, 1976

EVENT 3, 90 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	76.1	77.2	74.9	76.1	.6
15	83.7	84.6	82.7	83.7	.5
16	82.1	83.5	80.5	82.0	.8
17	83.0	84.0	81.8	82.9	.6
18	80.1	81.7	78.1	80.0	1.0
19	78.1	80.4	75.0	77.9	1.4
20	77.8	80.0	75.4	77.7	1.2
21	76.5	78.4	74.1	76.4	1.1
22	76.7	79.6	73.4	76.5	1.5
23	78.4	82.6	73.9	77.9	2.2
24	79.4	83.1	72.9	78.7	2.6
25	79.1	83.2	74.0	78.5	2.4
26	78.1	81.6	73.7	77.6	2.1
27	75.7	79.0	71.7	75.3	1.9
28	73.8	77.3	70.9	73.5	1.7
29	70.9	73.7	67.3	70.3	2.2
30	67.6	71.5	63.1	66.9	2.4
31	65.0	69.4	60.2	64.2	2.8
32	61.6	65.7	56.3	60.6	3.0
33	59.1	62.6	55.1	58.5	2.4
34	58.6	62.2	55.0	58.0	2.2
35	56.6	59.0	55.0	56.4	1.3
36	55.8	58.4	55.0	55.8	.9
37	55.1	55.9	55.0	55.1	.2
38	55.0	55.0	55.0	55.0	.0
39	55.6	57.0	55.0	55.6	.7
40	60.9	63.4	56.7	60.5	1.9
DBA	80.7	84.2	76.6	80.3	1.7
DBD	86.0	89.6	82.6	85.6	1.6
OASPL	90.2	92.3	88.9	90.1	.9
PNL	93.8	96.8	90.6	93.6	1.5
PNLT	94.1	96.8	90.6	93.9	1.5

0°  
(Microphone Location  
Relative to Helicopter)



**TABLE E-VII**  
**5 FOOT HOVER TEST**

**1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA**

BELL 212

OCTOBER 6, 1976

EVENT 4, 135 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	75.5	76.7	74.4	75.4	.6
15	83.9	84.7	83.4	83.9	.3
16	82.0	83.2	80.8	82.0	.7
17	82.4	83.0	81.3	82.4	.4
18	79.8	81.0	77.8	79.7	.8
19	77.7	79.4	75.2	77.5	1.2
20	75.6	78.4	71.1	75.3	1.6
21	74.5	78.1	68.3	73.8	2.6
22	75.0	79.4	70.4	74.3	2.6
23	75.7	78.9	69.9	74.9	2.8
24	75.5	79.9	69.5	74.6	2.8
25	74.8	77.9	70.2	74.4	2.0
26	73.7	78.4	68.7	73.1	2.4
27	72.4	76.8	65.7	71.3	3.1
28	71.1	75.4	64.2	70.1	3.2
29	68.9	73.9	62.9	67.8	3.2
30	65.5	71.8	58.8	64.0	3.5
31	62.7	69.2	56.0	61.2	3.5
32	60.6	66.8	53.8	59.0	3.8
33	59.1	64.9	51.6	57.4	3.8
34	57.8	65.3	50.1	55.6	4.2
35	55.5	62.7	48.0	53.3	4.2
36	53.6	59.0	47.2	52.0	3.7
37	50.4	54.5	45.3	49.4	3.0
38	49.9	57.4	45.0	48.3	3.2
39	51.1	54.1	46.9	50.6	2.1
40	56.6	58.8	52.5	56.2	1.8
DBA	77.3	80.0	72.3	76.7	2.3
DBD	82.6	84.7	78.6	82.2	1.9
OASPL	88.7	89.7	87.1	88.6	.8
PNL	90.7	93.6	86.4	90.2	2.2
PNLT	90.9	94.1	86.4	90.3	2.3

315°  
(Microphone Location  
Relative to Helicop)

# TABLE E-VII

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 5, 180 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	75.7	76.3	75.1	75.7	.3
15	83.2	83.8	82.4	83.2	.4
16	81.7	82.9	80.6	81.7	.5
17	81.2	81.9	79.8	81.2	.5
18	78.7	80.2	76.9	78.7	.7
19	77.2	78.6	74.0	77.1	1.2
20	76.2	78.2	73.1	76.0	1.2
21	74.4	78.9	71.3	74.0	1.8
22	75.0	77.4	71.2	74.7	1.5
23	74.8	77.1	71.1	74.4	1.8
24	76.1	79.0	70.4	75.4	2.5
25	75.8	79.8	70.6	75.0	2.7
26	75.0	78.9	68.4	73.9	3.1
27	72.6	77.6	65.1	71.4	3.4
28	70.8	76.1	63.3	69.6	3.3
29	68.6	74.9	61.1	67.1	3.6
30	65.9	72.7	57.9	64.4	3.5
31	62.9	68.6	56.4	61.7	3.1
32	60.6	66.6	53.9	59.3	3.3
33	59.0	65.2	52.8	57.6	3.3
34	56.5	62.0	50.7	55.3	3.3
35	53.5	57.5	48.9	52.7	2.6
36	52.8	58.1	48.0	51.8	2.8
37	49.5	53.8	45.8	48.9	2.3
38	48.0	52.1	45.0	47.5	2.0
39	47.6	49.8	45.0	47.3	1.5
40	51.2	54.9	47.6	50.7	2.0
DBA	77.9	82.9	72.6	77.0	2.8
DBD	83.0	86.7	78.7	82.5	2.1
OASPL	88.5	90.0	87.0	88.4	.7
PNL	90.8	94.5	86.4	90.2	2.2
PNLT	91.0	95.4	86.4	90.3	2.4

270°  
(Microphone Location  
Relative to Helicopter)

# TABLE E-VII

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 6, 225 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	75.8	76.8	74.0	75.7	.7
15	82.4	83.5	80.7	82.4	.7
16	81.2	82.5	80.2	81.2	.6
17	83.0	84.4	81.9	82.9	.7
18	79.9	81.4	78.6	79.9	.7
19	77.5	79.9	74.6	77.4	1.2
20	79.4	81.6	77.2	79.1	1.4
21	78.1	81.5	74.6	77.7	1.9
22	79.1	83.7	75.3	78.6	2.1
23	79.5	84.8	74.5	78.4	2.9
24	80.1	86.1	74.9	78.3	3.1
25	79.3	85.5	73.0	77.6	3.6
26	78.4	85.2	72.7	76.5	3.7
27	76.5	83.4	71.6	74.7	3.6
28	74.8	81.7	67.6	72.8	3.8
29	72.1	78.8	65.2	70.4	3.6
30	69.0	74.9	61.5	67.9	3.1
31	67.3	73.5	59.8	66.0	3.2
32	65.6	72.6	58.4	63.7	3.7
33	65.1	72.5	56.7	62.4	4.3
34	62.8	70.4	53.5	59.9	4.6
35	58.9	66.4	51.6	56.7	3.9
36	57.2	64.3	50.6	55.2	3.8
37	53.7	60.7	47.8	51.9	3.6
38	50.8	56.5	46.2	49.6	2.9
39	48.3	52.4	45.0	47.7	2.1
40	48.2	51.5	46.1	47.9	1.5
DBA	82.0	88.6	76.7	80.3	3.4
DBD	86.9	92.8	82.5	85.7	2.9
OASPL	90.4	94.0	88.4	90.1	1.6
PNL	94.4	100.4	89.9	93.3	2.9
PNLT	94.4	100.4	89.9	93.3	2.9

225°

(Microphone Location  
Relative to Helicopter)

TABLE E-VII  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 8, 315 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	77.4	79.9	74.1	77.2	1.4
15	86.3	88.6	83.9	86.2	1.0
16	85.1	86.9	82.7	85.0	1.0
17	87.1	89.1	85.3	87.0	1.0
18	84.3	88.1	81.4	84.0	1.6
19	83.6	88.0	79.1	83.2	2.0
20	85.5	88.5	79.7	85.0	2.2
21	87.3	90.3	81.6	86.8	2.3
22	87.8	90.6	81.9	87.4	2.1
23	88.2	91.0	83.0	87.8	2.0
24	88.7	91.9	83.1	88.3	2.1
25	88.1	91.2	82.0	87.6	2.1
26	88.2	92.2	81.7	87.8	2.0
27	85.9	90.0	80.5	85.3	2.2
28	84.6	88.1	80.0	84.3	1.8
29	82.4	85.6	79.0	82.0	1.8
30	79.0	81.6	75.3	78.7	1.7
31	76.4	78.5	74.2	76.2	1.2
32	72.7	74.8	67.8	72.6	1.3
33	70.9	73.3	67.7	70.7	1.3
34	70.6	74.4	67.2	70.3	1.7
35	67.6	70.4	64.3	67.4	1.6
36	65.0	66.5	61.9	64.8	1.4
37	61.2	63.9	58.5	61.0	1.3
38	58.7	60.7	56.4	58.6	1.2
39	55.9	57.5	55.0	55.8	.7
40	55.2	55.9	55.0	55.2	.2
DBA	91.1	94.0	87.4	90.9	1.4
DBD	95.6	98.3	92.7	95.4	1.4
OASPL	97.8	100.5	95.1	97.6	1.3
PNL	103.4	106.3	99.8	103.1	1.4
PNLT	103.5	106.6	99.8	103.2	1.4

135°  
(Microphone Location  
Relative to Helicopter)

**TABLE E-VII**  
**5 FOOT HOVER TEST**

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 15, 270 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	76.7	78.5	75.1	76.6	.8
15	84.6	85.8	82.8	84.5	.9
16	83.4	84.9	81.4	83.3	.9
17	87.7	89.1	86.5	87.6	.7
18	83.6	86.2	81.3	83.4	1.2
19	80.6	84.1	76.6	80.0	2.1
20	86.5	88.0	83.8	86.4	1.1
21	84.2	87.4	82.3	84.0	1.2
22	86.7	89.0	83.3	86.5	1.2
23	86.5	89.4	81.9	86.2	1.6
24	87.0	90.5	83.0	86.7	1.8
25	86.2	90.8	81.4	85.8	1.9
26	85.2	89.8	81.5	84.7	2.0
27	82.4	84.9	77.5	82.1	1.9
28	80.5	83.0	75.4	80.2	1.8
29	78.8	81.7	74.1	78.4	2.2
30	75.6	79.2	71.0	75.2	2.0
31	72.1	74.7	68.5	71.8	1.5
32	68.2	71.3	64.1	67.9	1.7
33	66.8	69.8	62.0	66.6	1.6
34	66.6	69.5	61.0	66.2	1.9
35	64.1	66.4	59.6	63.9	1.5
36	62.1	64.9	58.4	61.9	1.4
37	58.9	61.5	55.7	58.7	1.4
38	56.9	59.0	55.0	56.7	1.1
39	55.1	55.5	55.0	55.1	.2
40	55.0	55.0	55.0	55.0	.0
DBA	88.1	91.1	84.6	87.8	1.6
DBD	93.1	96.0	89.6	92.8	1.5
OASPL	96.0	97.9	94.1	95.9	1.0
PNL	100.7	103.1	97.8	100.5	1.3
PNLT	100.7	103.1	97.8	100.5	1.3

*180°*  
*(Microphone Location)*  
*(Relative to Helicopter)*

**TABLE E-VII**  
**500 FOOT HOVER TEST**  
**1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA**

BELL 212

OCTOBER 6, 1976

EVENT 20, 180 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
 (DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	71.2	73.1	67.4	71.0	1.3
15	75.7	78.5	71.5	75.4	1.7
16	69.8	73.3	64.6	69.0	2.8
17	73.6	76.4	67.9	73.1	2.2
18	75.2	77.4	70.0	74.9	1.8
19	73.7	76.2	68.4	73.4	1.9
20	68.8	71.7	65.1	68.5	1.9
21	59.6	62.5	56.8	59.4	1.5
22	66.3	68.1	63.4	66.1	1.4
23	73.5	75.3	70.2	73.2	1.5
24	75.6	77.7	71.9	75.3	1.7
25	73.3	75.6	69.3	73.0	1.7
26	68.5	70.4	63.6	68.3	1.4
27	74.2	76.2	69.2	74.1	1.4
28	68.7	70.8	63.1	68.5	1.5
29	70.2	72.6	65.7	70.0	1.3
30	67.1	69.7	63.1	67.0	1.3
31	64.3	66.4	60.6	64.2	1.2
32	62.1	64.4	59.9	62.0	1.1
33	61.0	63.8	58.8	60.8	1.2
34	57.3	59.5	54.0	57.1	1.4
35	54.2	56.8	51.2	54.0	1.3
36	51.5	53.8	48.2	51.3	1.2
37	46.6	48.3	45.1	46.6	.7
38	45.1	46.0	45.0	45.1	.2
39	45.1	46.1	45.0	45.1	.3
40	45.0	45.2	45.0	45.0	.1
DBA	77.2	79.1	73.2	77.0	1.2
DED	81.7	83.5	78.3	81.6	1.1
OASPL	84.3	85.8	82.7	84.2	.8
PNL	88.9	90.5	85.5	88.8	1.1
PNLT	89.0	90.5	85.5	88.8	1.0

90°  
 (Microphone Location  
 Relative to Helicopter)

# TABLE E-VII

## 500 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 5, 1976

EVENT 20, 180 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	75.8	78.0	71.1	75.5	2.0
15	80.4	82.4	75.3	80.0	1.9
16	72.0	76.5	67.1	71.5	2.2
17	79.5	80.7	77.9	79.4	.7
18	74.9	76.0	73.4	74.8	.8
19	64.4	66.1	61.2	64.3	1.1
20	64.5	66.1	58.2	64.2	1.8
21	64.1	65.5	61.5	64.0	1.0
22	74.9	77.0	72.4	74.7	1.2
23	77.2	78.8	74.9	77.1	1.0
24	75.8	77.5	73.4	75.7	1.1
25	68.0	70.2	64.2	67.8	1.5
26	76.4	78.5	73.2	76.2	1.3
27	72.5	74.6	68.6	72.3	1.6
28	74.5	76.5	69.8	74.2	1.8
29	74.4	76.6	68.0	73.9	2.4
30	70.8	72.8	64.1	70.3	2.3
31	69.1	71.1	62.5	68.7	2.3
32	68.4	70.6	62.7	68.0	2.2
33	67.0	69.1	62.5	66.7	1.8
34	63.2	66.5	57.8	62.8	2.2
35	60.3	62.8	55.9	60.0	1.7
36	57.4	59.3	53.3	57.1	1.5
37	52.5	54.8	49.2	52.3	1.4
38	49.1	50.4	47.2	49.1	.8
39	49.1	50.5	47.9	49.0	.6
40	48.9	50.2	47.2	48.9	.7
DBA	80.5	82.5	76.0	80.2	1.7
DBD	84.4	85.9	80.6	84.2	1.4
CASPL	87.0	88.4	83.9	86.8	1.2
PNL	92.0	93.5	88.6	91.9	1.3
PNLT	92.2	93.5	88.6	92.0	1.2

270°

(Microphone location  
Relative to Helicopter)

# TABLE E-VII

## 500 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 20, 180 DEGREES, CENTERLINE MICROPHONE (SOFT SITE)

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	SID DEV
14	72.7	75.2	68.4	72.4	1.8
15	73.3	76.7	68.2	72.7	2.3
16	77.1	79.9	72.3	76.5	2.4
17	77.5	79.3	75.2	77.3	1.2
18	72.6	75.2	69.8	72.3	1.5
19	64.7	67.5	59.7	64.3	1.9
20	77.6	80.1	74.7	77.4	1.3
21	79.6	82.0	74.1	79.2	2.1
22	83.9	86.0	80.3	83.6	1.6
23	79.6	81.3	74.3	79.4	1.4
24	78.2	79.9	72.8	77.9	1.6
25	83.3	85.7	77.8	83.0	1.7
26	77.9	81.6	73.1	79.4	2.3
27	82.1	84.0	75.7	81.7	2.2
28	80.5	82.5	72.3	79.9	2.6
29	77.6	79.8	69.9	77.0	2.6
30	76.5	78.5	69.4	76.0	2.5
31	74.0	76.7	66.5	73.4	2.7
32	71.5	73.6	66.6	71.1	1.8
33	69.5	71.6	66.4	69.3	1.4
34	66.6	68.2	62.8	66.3	1.6
35	62.6	64.6	59.8	62.4	1.3
36	60.0	61.6	58.5	59.9	.9
37	55.4	57.1	53.8	55.4	.8
38	54.6	55.7	53.3	54.6	.6
39	56.0	56.9	54.4	55.9	.5
40	57.0	57.9	55.7	57.0	.5
DBA	86.0	87.9	79.8	85.6	2.1
DED	90.2	91.8	85.0	90.0	1.8
OASPL	91.3	92.7	86.3	91.1	1.6
PNL	97.6	98.9	92.5	97.4	1.7
PNLI	97.6	98.9	92.5	97.4	1.7

(Helicopter Located  
Directly Overhead)



TABLE E-VIII  
Helicopter Noise Level Data  
Bell 212

October 6, 1976

max RMS Noise Level - dBA re 20 mPa

HELICOPTER OPERATION	RUN NUMBER	MICROPHONE OFFSET TO THE WEST		MICROPHONE OFFSET TO THE EAST	
		150 M	75 M	75 M	150 M
5 FE. HOVER 0°	1	80.3	85.8	—	—
	10	— (270°)	—	94.8	86.5
5 FE. HOVER 45°	2	84.5	91.8	—	—
	11	— (225°)	—	89.8	83.0
5 FE. HOVER 90°	3	79.0	88.8	—	—
	12	— (180°)	—	88.8	84.0
5 FE. HOVER 135°	4	76.5	86.5	89.3	84.3
	13	— (135°)	—	92.0	83.8
5 FE. HOVER 180°	5	75.3	87.3	88.5	82.3
	14	— (90°)	—	—	85.5
5 FE. HOVER 225°	6	77.3	84.3	94.3	82.5
		(45°)			
5 FE. HOVER 270°	7	78.5	82.8	94.8	85.0
		(0°)			
5 FE. HOVER 315°		—	—	—	—
		(315°)			
500 FE. HOVER 180°	20	78.8	86.3*	87.3*	82.3
		(90°)			(270°)
500 FE. HOVER 90°	21	84.3	85.8*	86.5*	82.0
		(180°)			(0°)

\* Microphone at cantline

TABLE E-VIII  
Helicopter Noise Level Data  
BELL 212

OCTOBER 6, 1976

MAX RMS Noise Level - dBA @ 20 m P<sub>2</sub>

HELICOPTER OPERATION	RUN NUMBER	MICROPHONE OFFSET TO THE WEST 150 M		MICROPHONE OFFSET TO THE EAST 150 M	
		CENTER LINE		CENTER LINE	
3° GLIDE SLOPE	41	81.3	86.5	84.9	78.0
	42	77.8	81.8	82.3	81.3
	43	77.8	83.0	83.9	81.0
6° GLIDE SLOPE	22	79.8	84.3	84.0	—
	23	78.5	85.0	84.0	82.0
	24	81.0	84.6	84.5	80.0
9° GLIDE SLOPE	25	83.3	88.0	86.5	79.0
	26	84.5	86.0	86.5	78.8
	27	81.0	87.0	86.0	78.5
	28	79.5	85.0	84.8	78.0
60 KT LEVEL FLYOVER	29	76.0	79.8	79.5	77.0
	30	80.5	80.8	79.3	75.0
	31	77.8	78.8	79.3	79.5
99 KT LEVEL FLYOVER	32	81.0	84.5	—	79.8
	33	80.0	82.5	82.5	80.0
	34	81.0	83.3	81.0	78.8
110 KT LEVEL FLYOVER	35	82.0	85.3	84.5	83.8
	36	83.0	85.5	87.3	81.8
	44	82.8	87.0	86.0	80.5
	45	81.8	81.3	81.5	79.5

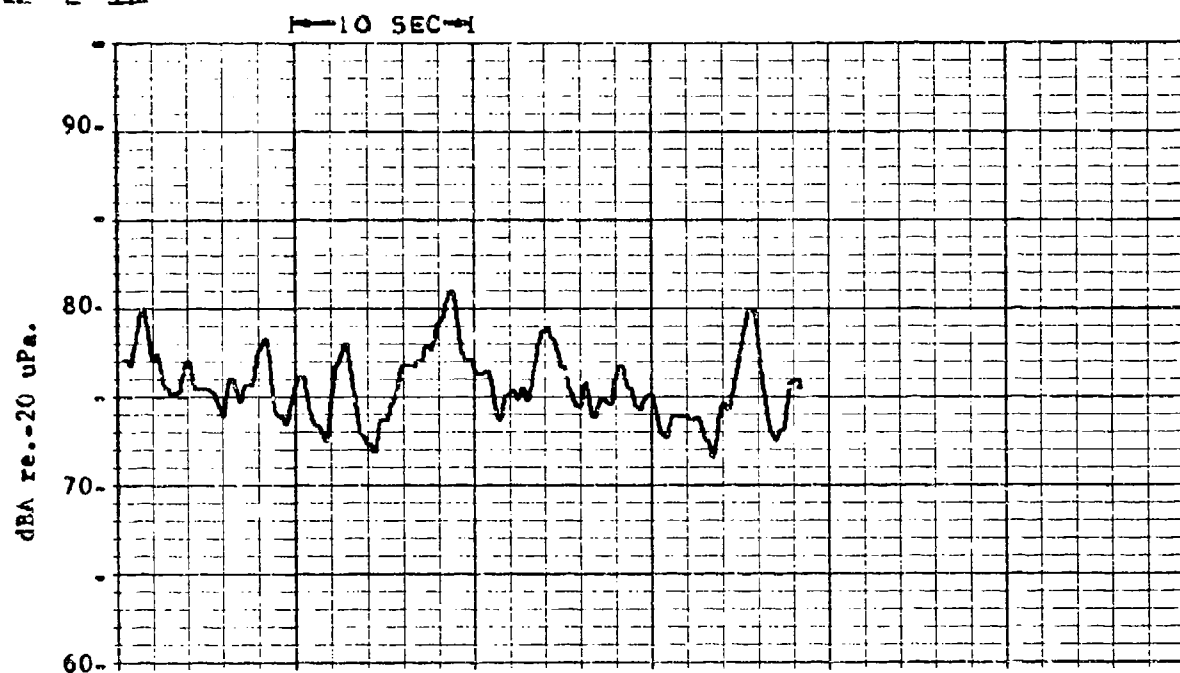
BELL 212

OCTOBER 6, 1976

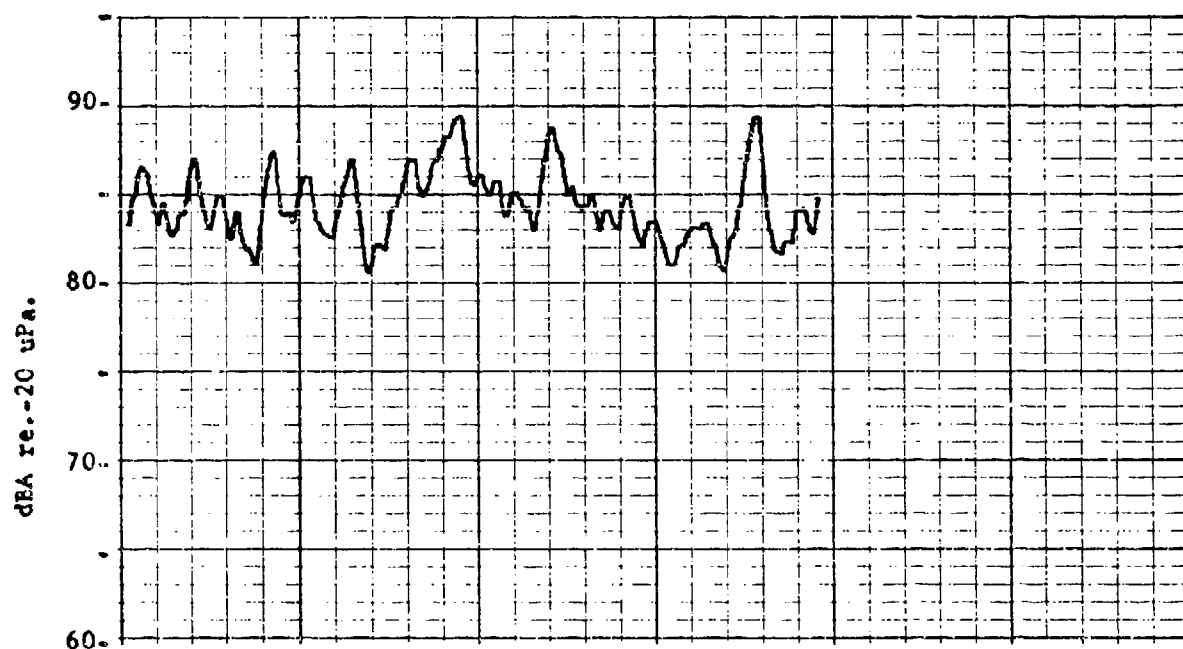
max. RMS Noise Level - 1BA ne 20 uPa

HELICOPTER OPERATION	RUN NUMBER	MICROPHONE OFFSET TO THE WEST 150M CENTER LINE		MICROPHONE OFFSET TO THE EAST 150M CENTER LINE	
114KT	37	83.3	90.0	87.0	86.3
LEVEL	38	84.5	90.8		85.0
FLYOVER	46	84.5	87.0	86.5	85.3
	47	82.3	86.0	85.0	85.0
LEVEL FLYOVER					
LEVEL FLYOVER					
LEVEL FLYOVER					
LEVEL FLYOVER					
LEVEL FLYOVER					

TABLE E-IX



150 METERS WEST OF CENTER LINE

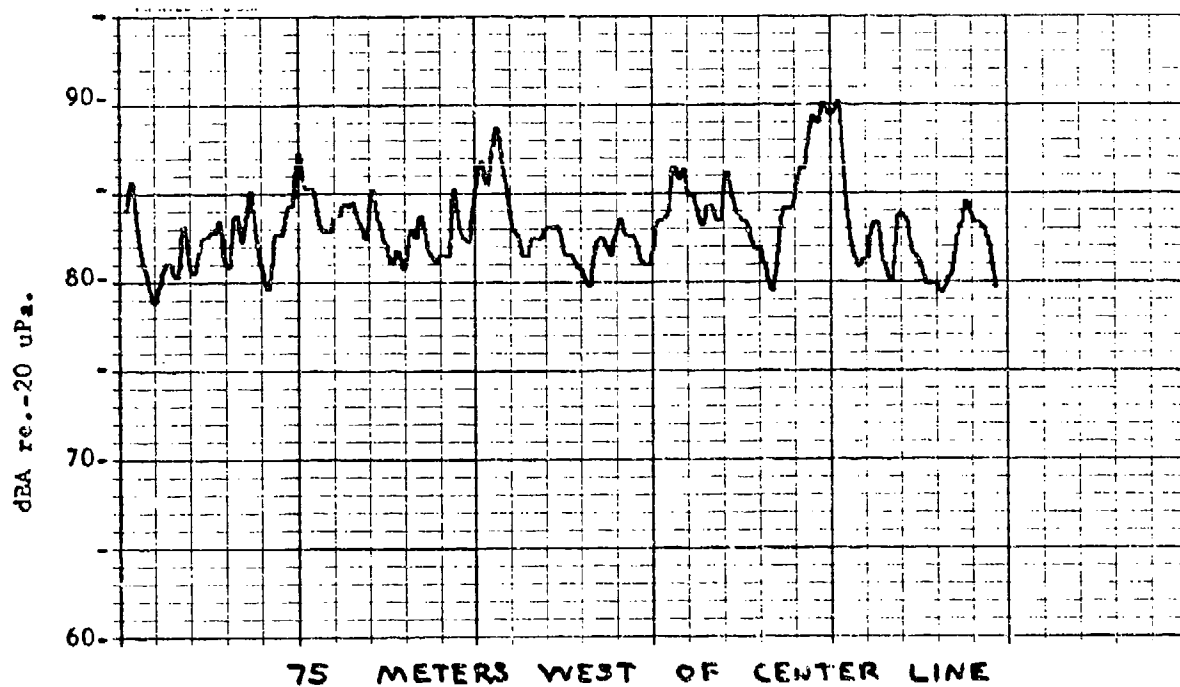
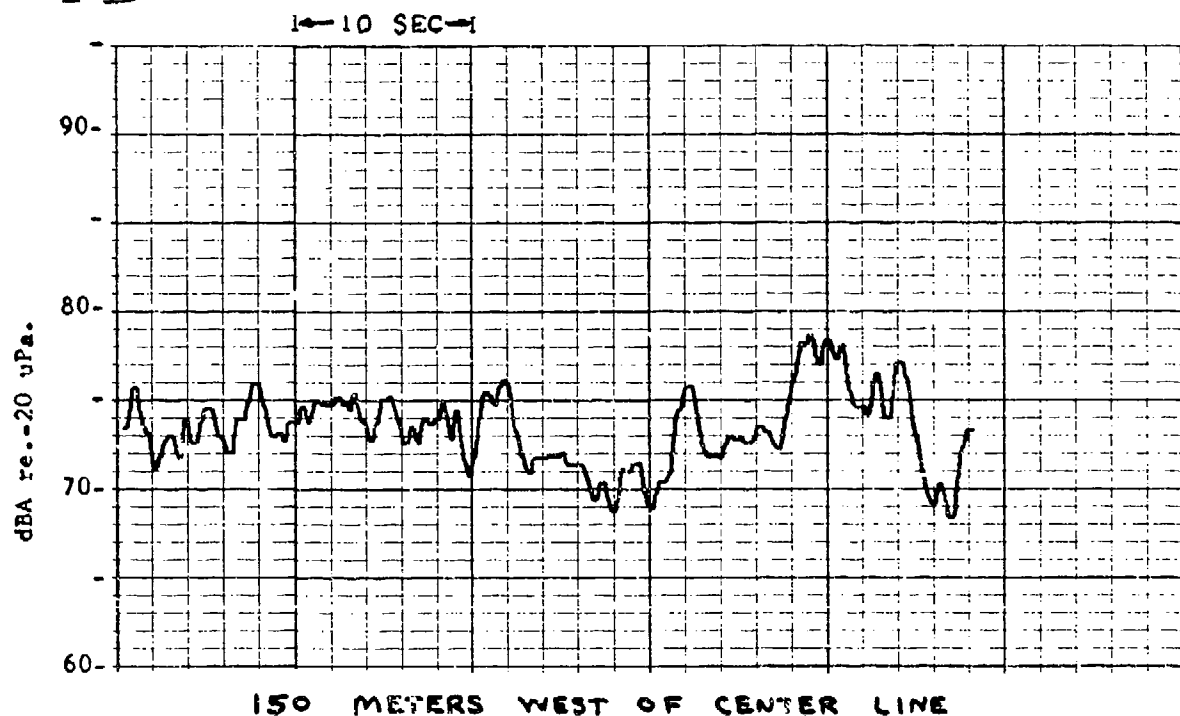


75 METERS WEST OF CENTER LINE

NOISE LEVEL TIME HISTORIES  
 BELL 212 HELICOPTER  
 90° HOVER - 5 FT

RUN 3

TABLE E-IX

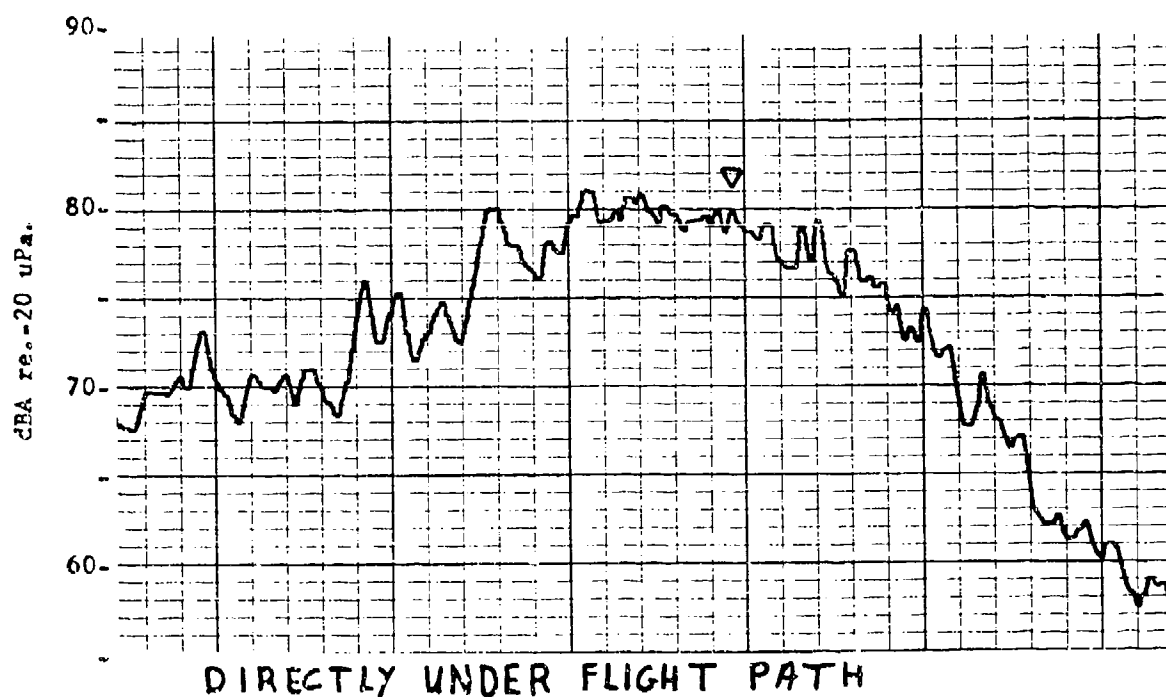
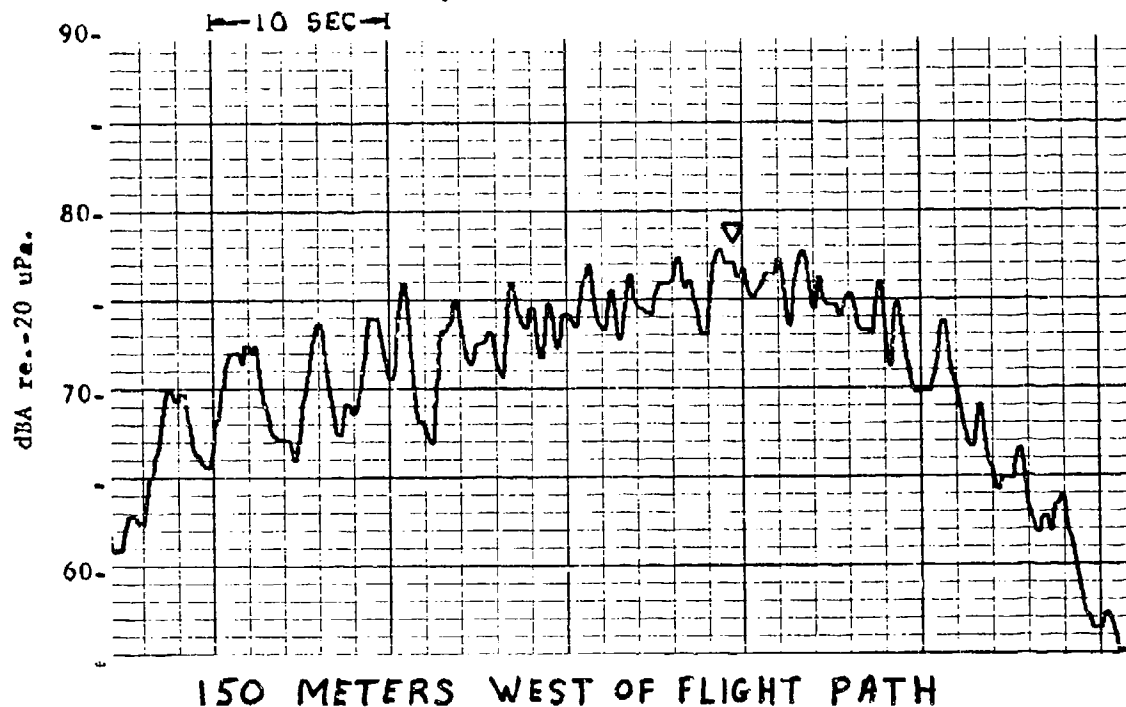


NOISE LEVEL TIME HISTORIES  
 BELL 212 HELICOPTER  
 180° HOVER - 5 FT.

RUN 5

TABLE E-IV

▽ = CENTER CROSSING

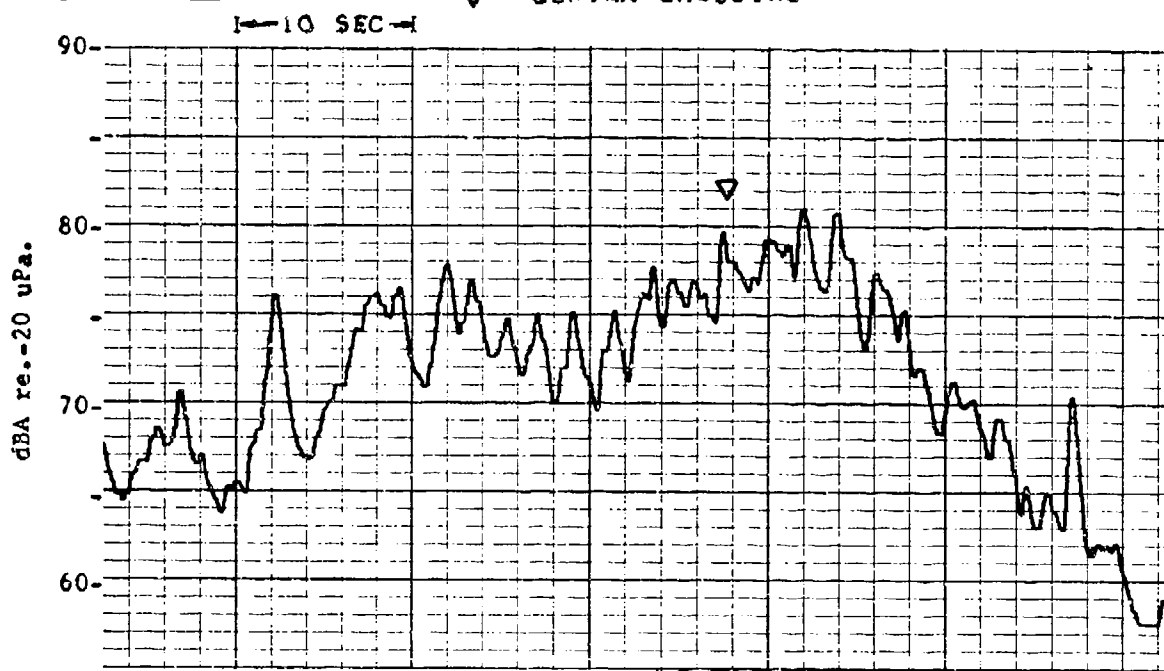


NOISE LEVEL TIME HISTORIES  
BELL 212 HELICOPTER  
3° APPROACH

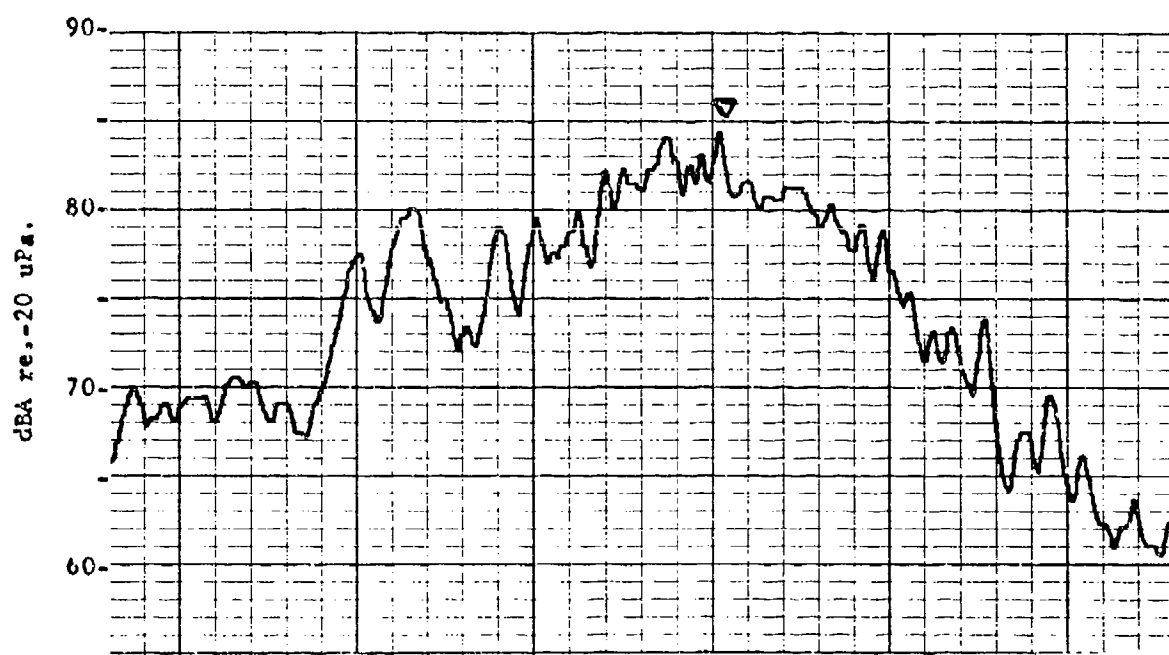
RUN 42

TABLE E-IV

▽ = CENTER CROSSING



150 METERS WEST OF FLIGHT PATH



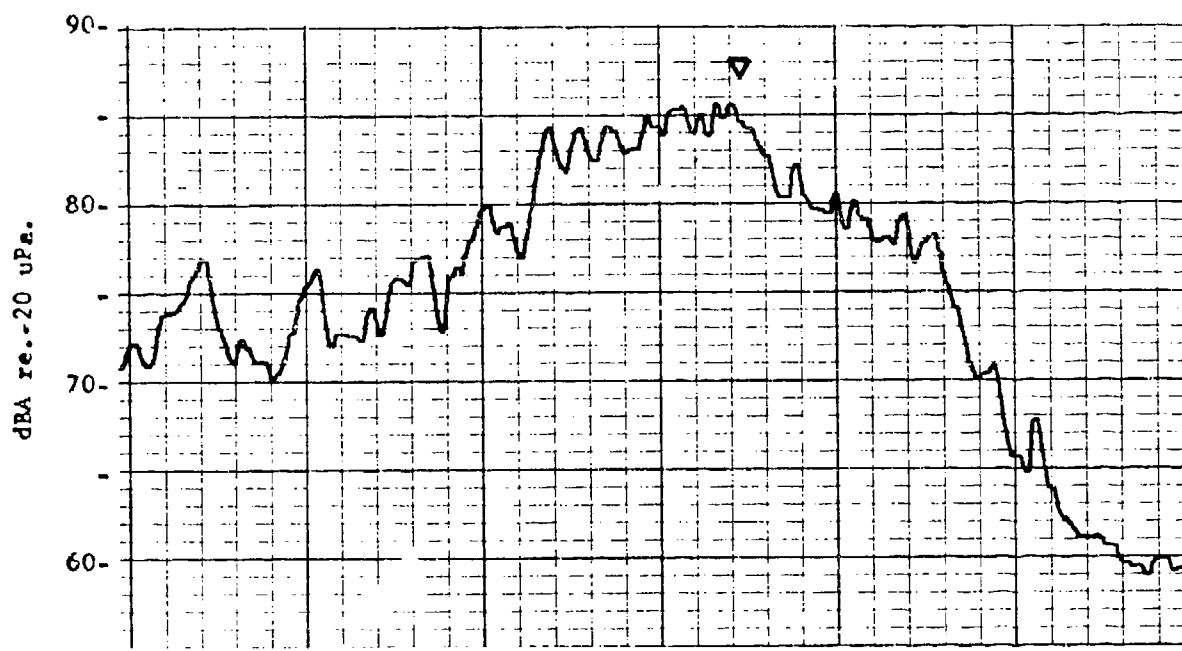
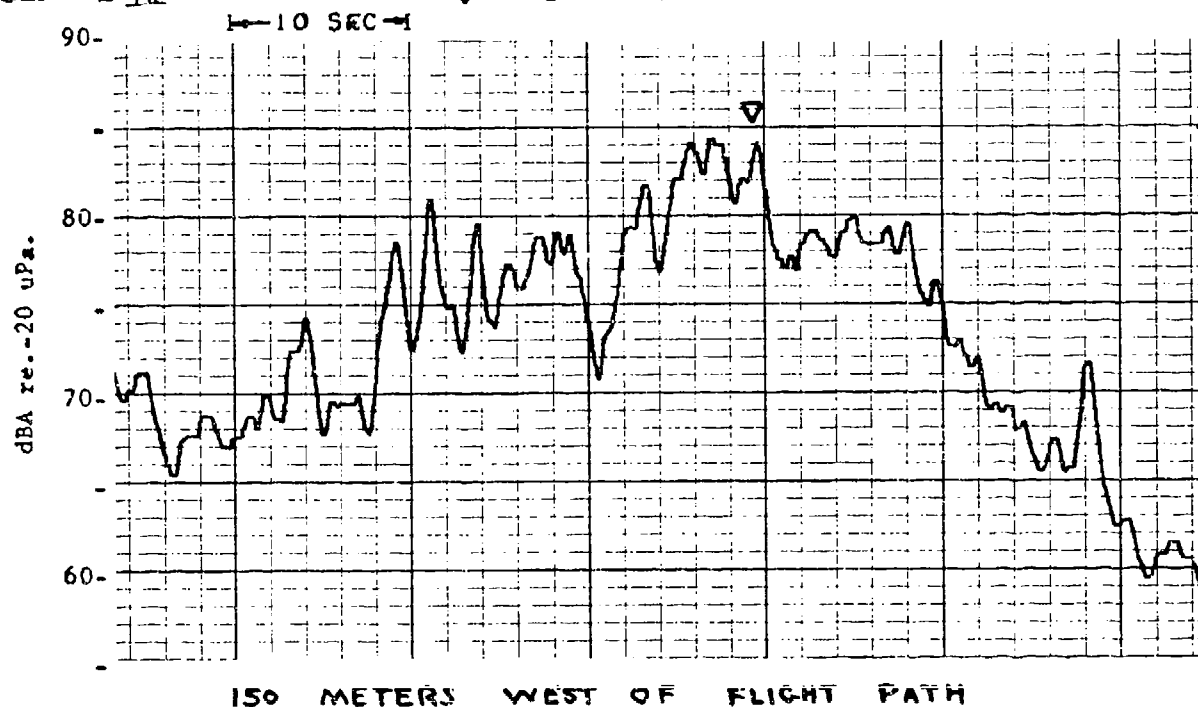
DIRECTLY UNDER FLIGHT PATH

NOISE LEVEL TIME HISTORIES  
BELL 212 HELICOPTER  
6° APPROACH

RUN 24

TABLE E-IX

▽ = CENTER CROSSING



DIRECTLY UNDER FLIGHT PATH

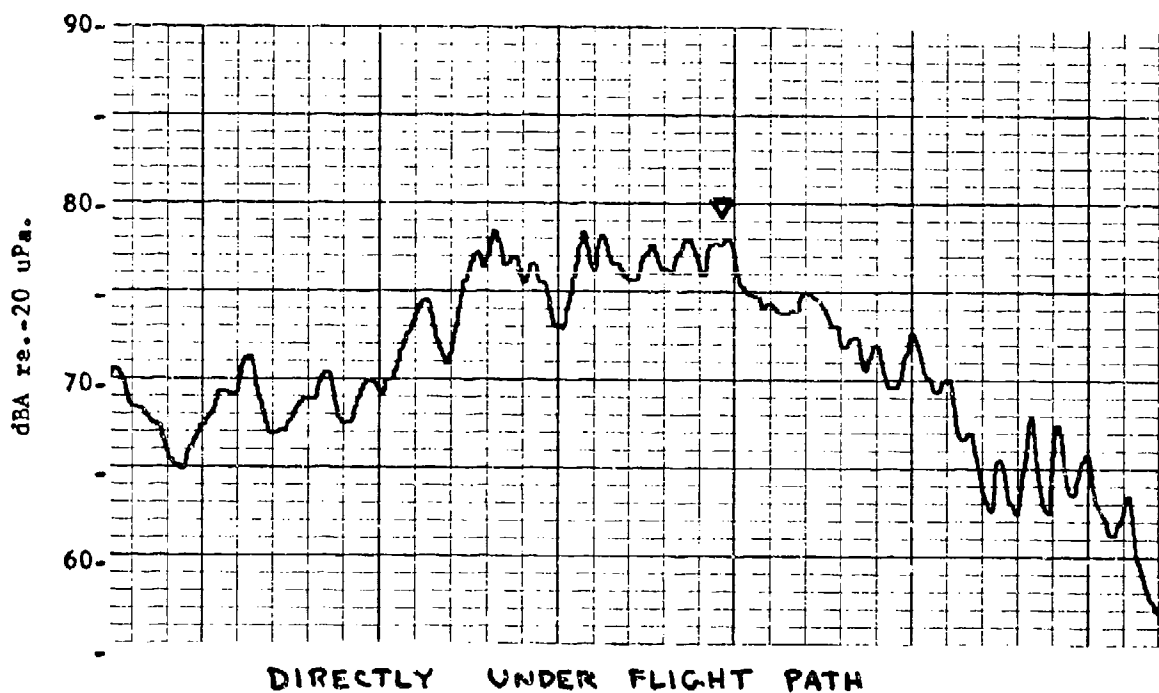
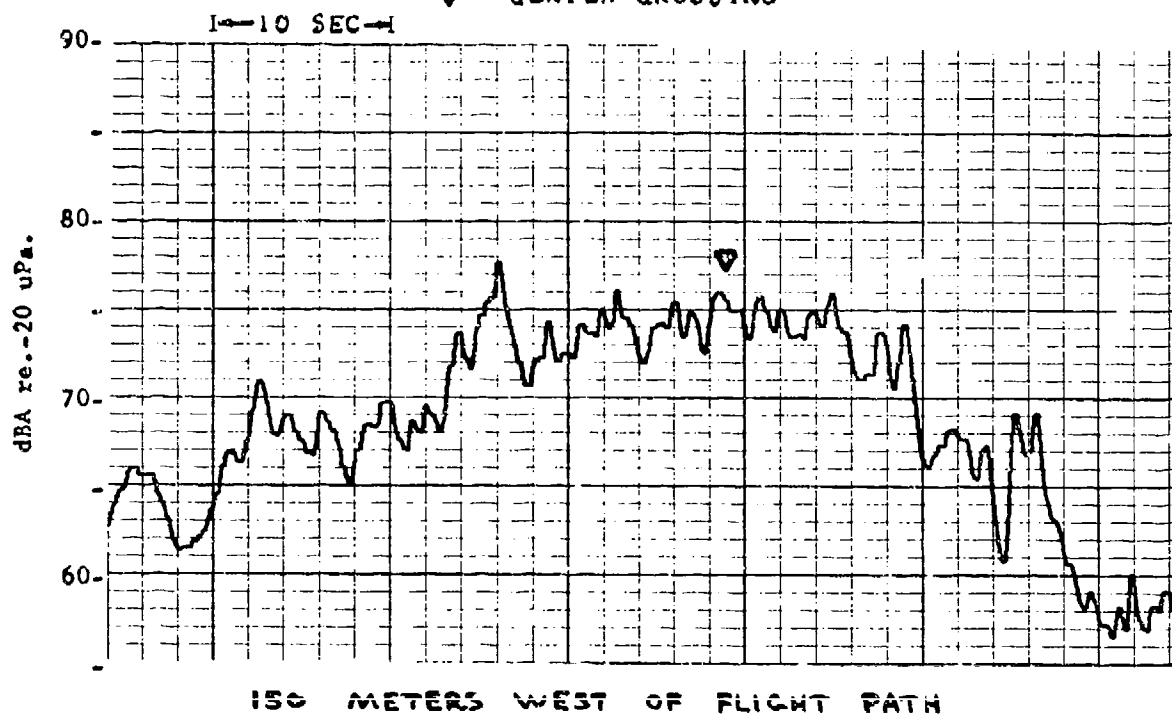
NOISE LEVEL TIME HISTORIES  
BELL 212 HELICOPTER  
9° APPROACH

RUN 26



TABLE E-IX

▽ = CENTER CROSSING

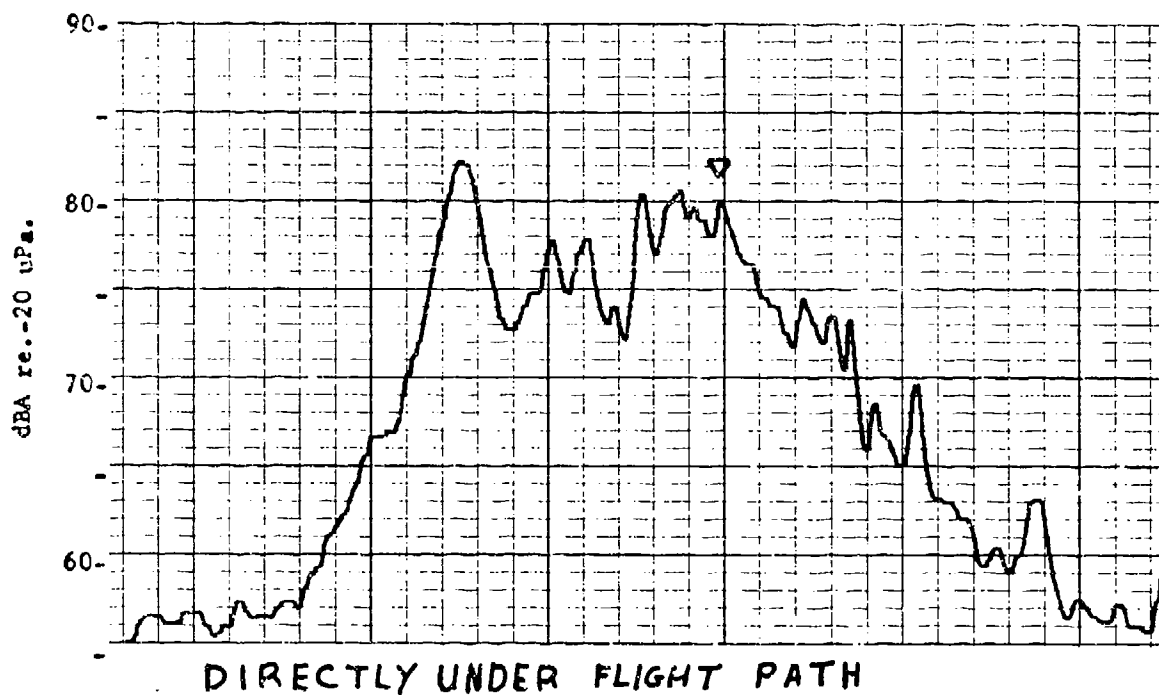
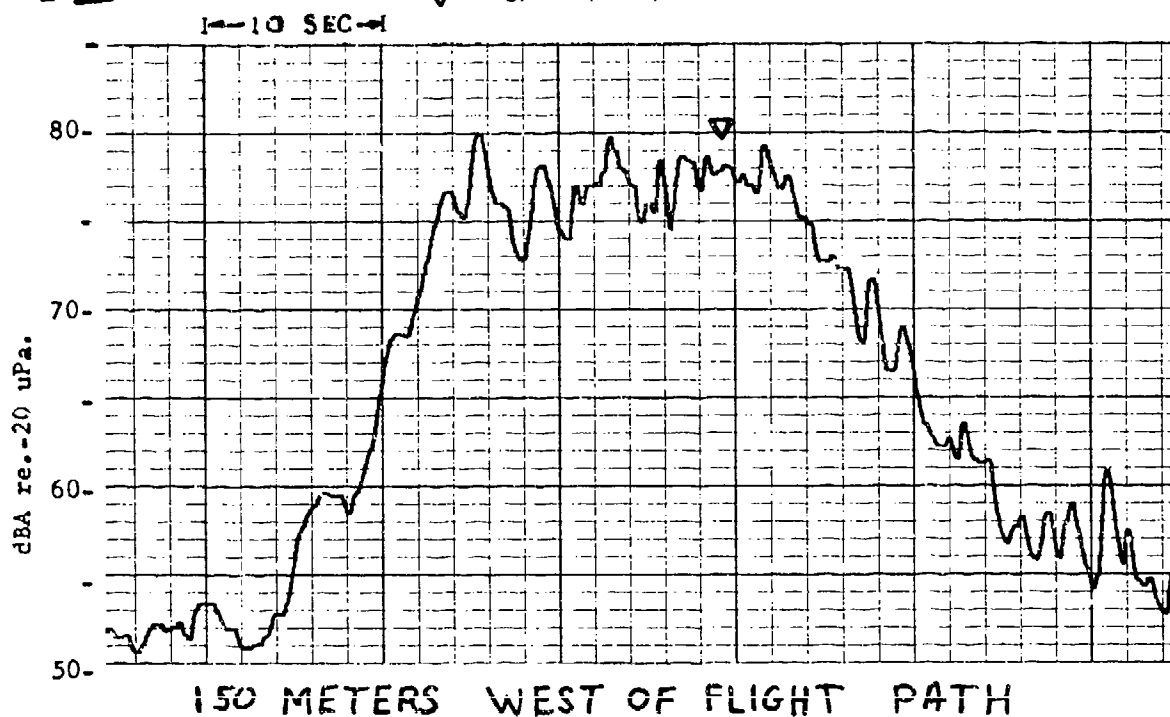


NOISE LEVEL TIME HISTORIES  
BELL 212 HELICOPTER  
LEVEL FLYOVER - 60 KTS

RUN 31

TABLE E-IX

▽ = CENTER CROSSING



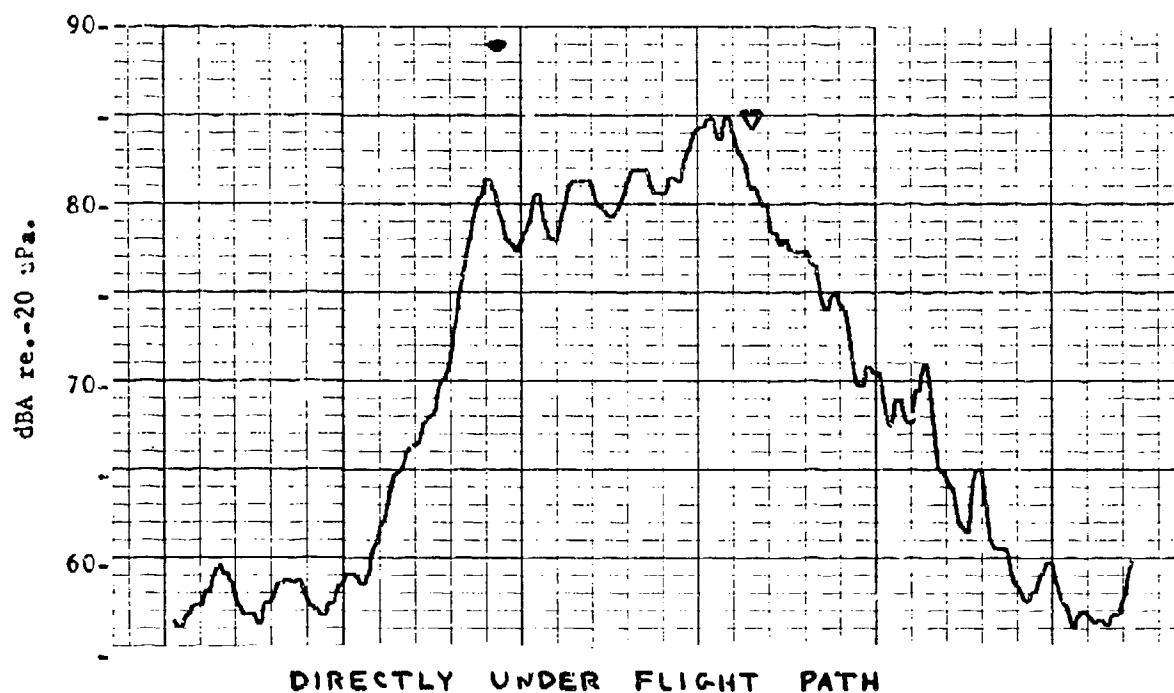
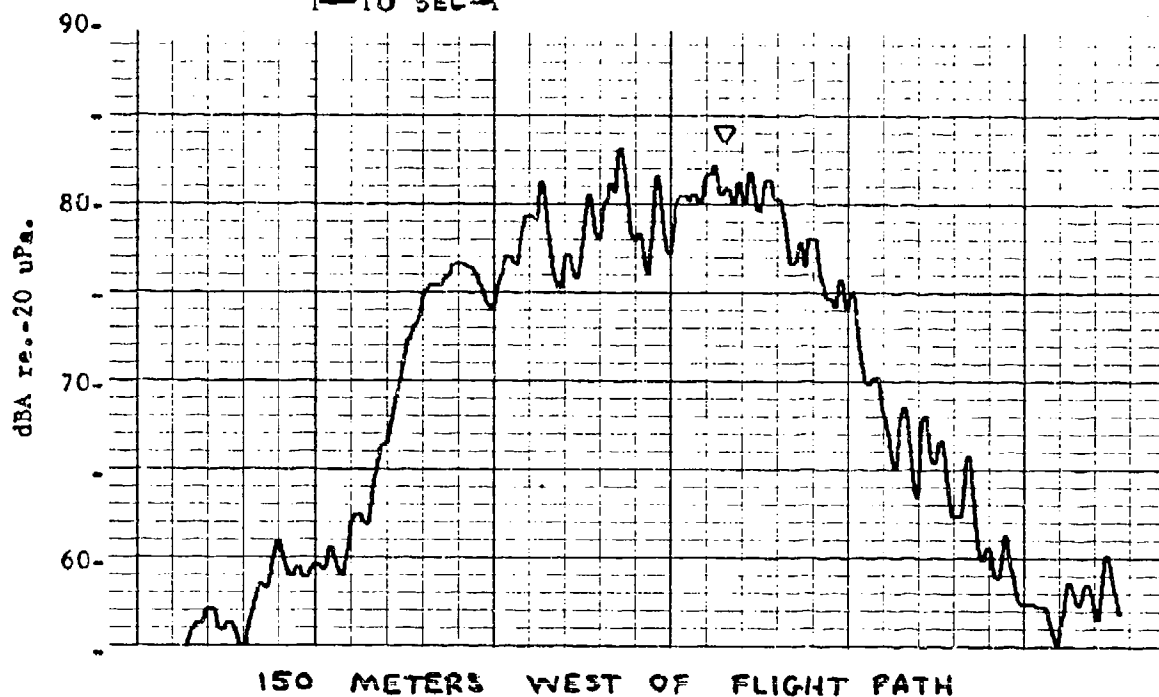
NOISE LEVEL TIME HISTORIES  
 BELL 212 HELICOPTER  
 LEVEL FLYOVER - 99 KTS.

RUN 33

TABLE E-IX

▽ = CENTER CROSSING

10 SEC

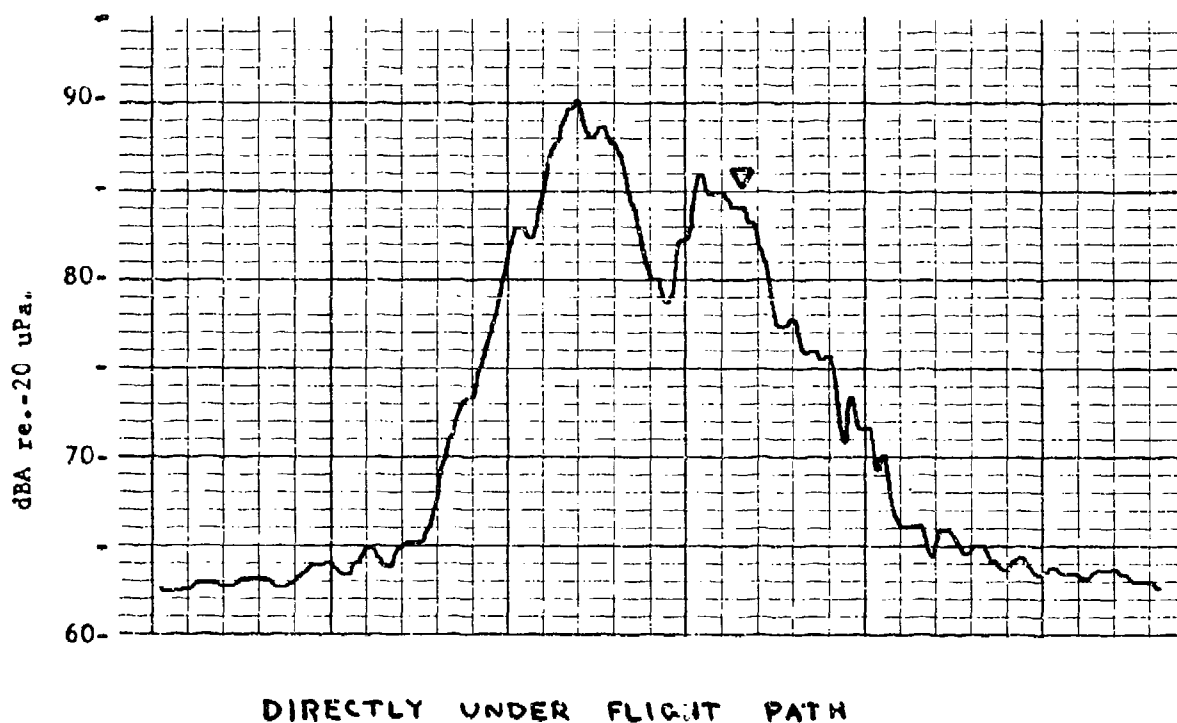
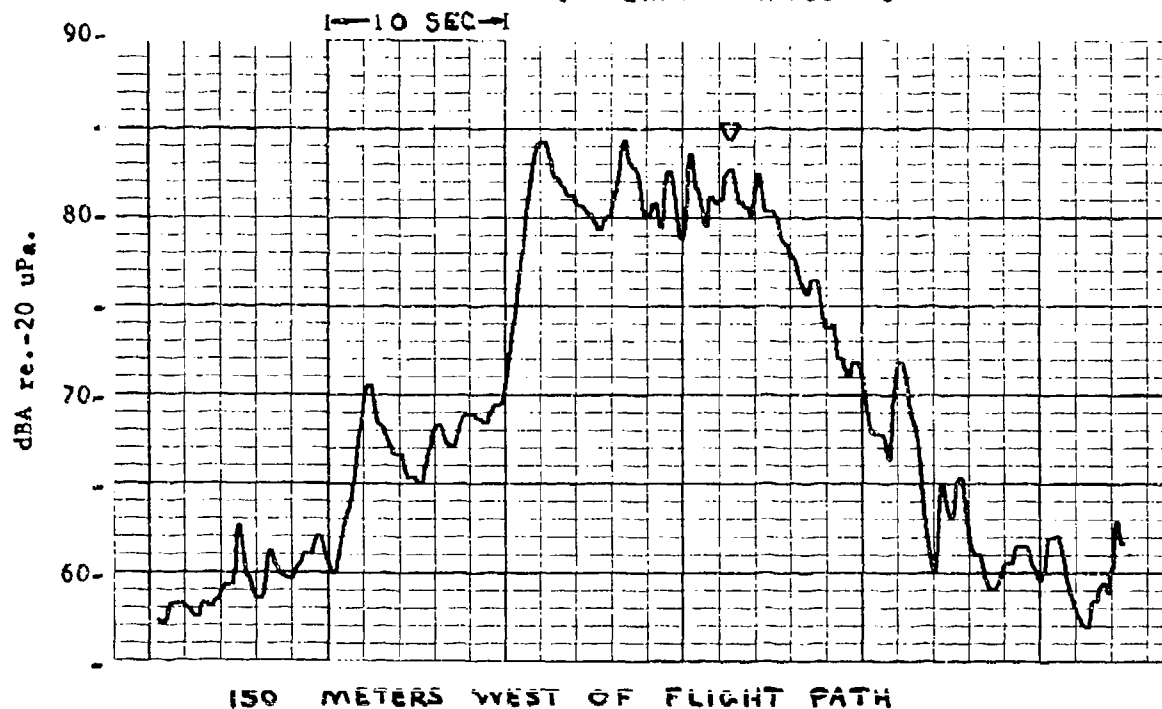


NOISE LEVEL TIME HISTORIES  
BELL 212 HELICOPTER  
LEVEL FLYOVER - 110 KTS

RUN 36

TABLE E-IX

▽ = CENTER CROSSING



NOISE LEVEL TIME HISTORIES  
BELL 212 HELICOPTER  
LEVEL FLYOVER - 114 KTS

RUN 38

DATA TABLE F

Sikorsky S-61 (SH-3A)

TEST DATE: 10-28-76

TEST SITE: NASA LANGLEY

SECTION - F	CONTENT	PAGE #
I	RUN LIST	473
II	GROUND AND FLIGHT LOG DATA	476
III	METEOROLOGICAL DATA	479
IV	LEVEL FLYOVER AND APPROACH NOISE DATA	480
V	TIME HISTORIES	482
VI	1/3-OCTAVE BAND SPECTRA--FLYOVER AND APPROACH	502
VII	1/3-OCTAVE BAND SPECTRA--5 FOOT HOVER	522
VIII	MAXIMUM dBA NOISE LEVEL (ALL RUNS)	545
IX	SELECTED dBA TIME HISTORIES--GRAPHIC PLOTS	547

THE NOISE LEVELS PRESENTED IN SECTIONS IV, V AND VI  
HAVE BEEN TABULATED FOR THE SELECTED RUNS AND MICROPHONE  
LOCATIONS INDICATED ON THE FOLLOWING PAGE.

TABLE F-I

## LIST OF RUNS SELECTED FOR ANALYSIS

RUN#	TEST CONDITION	MICROPHONE LOCATION			
		WEST		EAST	
		150 m SIDELINE	CENTER LINE	CENTER LINE	150m SIDELINE
16	9° Approach 60 Kts		X		
18	Level Flyover 60 Kts		X		
19	↓		X		
20	6° Approach 60 Kts		X		
26	Level Flyover 100 Kts		X		
27	↓		X		
28	↓		X		
31	3° Approach 60 Kts		X		
32	Level Flyover 115 Kts	X	X	X	X
33	↓	X	X	X	X
34	↓	X	X	X	X
	Microphone Locations	Over Concrete	Over Concrete	Over Grass	Over Concrete

#### GENERAL COMMENTS

- o There were no problems encountered while testing the Sikorsky S-61 (SH-3A).
- o The weather conditions during the test were very windy with gusts in the 10-20 mph range.
- o Because the S-61's gross weight was effected by its rate of fuel consumption, a table has been inserted which provides a log of the gross weight as a function of time.

100% COPY

TABLE F-II Ground and Flight Log Data

Helicopter, Sikorsky S-61, Military Designation SH-3D, Registration Number: 538 NASC, Date: Oct. 22, 1976

Un	Time	Target		Ground		Actual		Comments					
		Type	Velocity	Altitude	DBA	Heading	Air Speed	Rate of Turn	Altitude	Temp	RH	Wind	
1	8:18	Hover	0	5 ft	94.0	0° N	0	0	60 ft	39.5°F	—	N	Abort
2	8:19				94.0	45°			60				
3	8:20				97.0	45°			60				
4	8:21				96.5	90° E			70				
5	8:22				97.0	125°			70				
6	8:22.5				96.0	180° E			71				
7	8:23				97.0	255°			72				
8	8:25				92.0	280°			75				
9	8:26				92.0	315°			70				
10	8:27				92.0	0°			60				
11	8:28				94.0	45°			60				
12	8:29				94.5	90° E			71				
13	8:30				98.0	125°			72				
14	8:31				95.0	180° E			71				
15	8:45	0° App	60 ft	400 ft	—	S	60 ft	1200 ft/min	14	40.0°F	54%	N	good run; or slide slope
16	8:47				83.0			1100	15				good run; on slide slope
17	8:50				84.0			1500	17				Slightly high after 1000
18	9:05	Level Flyer	60 ft	500 ft	81.0	S	60 ft	0	56	50.0			Ground Speed 23 kts
19	9:09				82.0				40				
20	9:14	0° App	60 ft	400 ft	85.0	S	60 ft	200 ft/min	20	40.0°F			Slide Slope Good 30 kts
21	9:19				85.5				21				Ground Speed 30 kts
22	9:25	Hover	0	500 ft	94.0	0° N	0	0	60	30.0			Abort Altitude too Low
23	9:28				95.0	0° N			60				
24	9:25				96.0	90° E			60				Heading 275° cut get 220° because of 2051 knots
25	9:27				98.0	275°			75				



II-3 37861

Helicopter Model: Sikorsky S-61

Registration Number:

Test Date: Oct. 28, 1976

Run	Time	Type	Velocity M.P.H.	Altitude over M.S.	dB A	Heading	Air Speed	Rate of Descent	Mp or Torque	Altitude over M.S.	RPM	OAT	Temp	RH	Wind Speed	Wind Direction	Comments
26	9:21	Level Flyover	100 Kts	500 ft	85.0	S	120 Kts	0	68%	500 ft	103%	42°C					Needs to extend flight path Right Path Extended, Good
27	9:34	↓	↓	↓	82.5	↓	↓	↓	70	↓	↓	↓					
28	9:37	↓	↓	↓	82.0	↓	↓	↓	65	↓	↓	↓					
29	9:44	30° Fpp	60 Kts	400 ft	85.5	S	60 Kts	600 ft/min	32	375 ft	105%	22°C					Slightly below glide slope
30	9:47	↓	↓	↓	—	↓	↓	500	33	400 ft	104	↓					Slightly above glide slope
31	9:52	↓	↓	↓	87.0	↓	↓	500	30	↓	↓	32°C					Glide slope looks good
32	10:06	Level Flyover	115 Kts	500 ft	86.5	S	115 Kts	0	72	500 ft	103%	40°C	41°F	52%	10-20 Kts	N	120 Kts. Ground Speed ↓
33	10:10	↓	↓	↓	82.5	↓	↓	↓	70	↓	↓	↓					125 Kts
34	10:15	↓	↓	↓	84.5	↓	↓	↓	78	↓	↓	↓					130 Kts

*TABLE F-II*

SIKORSKY S-61 (SH-3A)

LOG OF GROSS WEIGHT vs. TIME

<u>Time</u>	<u>Run #</u>	<u>Fuel (lbs.)</u>	<u>Total Gross Weight</u>
8:15	1	3000	18,724
8:56	17	2700	18,424
9:11	19	2500	18,224
9:20	22	2350	18,074
9:30	25	2200	17,924
10:00	31	1700	17,424
10:14	34	1500	17,224

TABLE F-III

Meteorological Data  
Langley Air Force Base

October 28, 1976

TIME (hours)	TEMP. (of)	BAR. PRESS. (mmhs)	REL. HUM. (%)	WIND SPEED (mph)	WIND DIRECTION (degrees)	REMARKS
0800	53	778	62	5-19	0	Sky - Partly Cloudy
0815	53		66	10-19	20	
0830	53		67	16-23	25	
0845	53		68	14-22	20	
0900	54		69	9-19	30	
0915	54		70	11-19	30	
0930	54		69	13-22	25	
0945	54		69	8-20	20	
1000	54		69	7-16	30	
1015	54		68	12-18	30	
1030	55		67	18-23	40	Sky - Clear
1130	54		65	14-18	10	
1145	56		64	10-16	30	
1200	56		64	8-12	35	
1215	55		63	8-14	20	
1230	56		60	8-12	20	
1245	56		58	13-18	25	
1300	57	774	56	8-15	40	
1315	58		53	8-16	40	
1330	57		52	5-12	50	Sky - Clear
1345	57		50	8-15	40	
1400	57		48	8-12	45	
1415	57		48	5-12	15	
1430	57		47	5-12	50	
1445	58		48	5-9	30	
1500	57	772	47	5-8	20	
1515	57		47	6-12	25	
1530	57		47	5-15	60	
1545	58		48	8-11	30	
1600	58		47	8-10	50	
1615	57		46	9-11	60	
1630	56		46	5-8	40	
1645	57		46	2-9	40	
1700	57		47	1-6	25	
1715	56		48	2-7	40	

*TABLE F-IV*

HELICOPTER APPROACH AND FLYOVER NOISE DATA

SIKORSKY S-61

OCTOBER 28 1976

MICROPHONE OFFSET 150 METERS WEST  
(LEVELS-DB RE 20 MICRO PA)

EVENT	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	LEQ	DUR(A)	DUR(P)	TP
32	90.3	83.9	87.7	89.3	94.6	94.6	80.0	8.5	8.5	.0
33	89.5	80.9	85.0	86.6	92.3	93.3	77.1	11.0	10.0	1.2
34	89.6	81.8	85.6	87.1	92.9	92.9	78.8	8.5	8.5	.0

MICROPHONE OFFSET 150 METERS EAST  
(LEVELS-DB RE 20 MICRO PA)

EVENT	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	LEQ	DUR(A)	DUR(P)	TP
32	89.3	81.6	85.6	85.0	92.2	92.2	78.5	9.5	10.5	.0
33	89.2	81.7	85.4	85.1	91.7	91.7	77.1	13.0	14.5	.0
34	90.5	83.1	86.7	86.5	93.2	93.2	79.3	11.5	12.0	.0

# TABLE F-IV

## HELICOPTER APPROACH AND FLYOVER NOISE DATA

SIKORSKY S-61

OCTOBER 28 1976

CENTERLINE MICROPHONE - HARD SITE  
(LEVELS-DB RE 20 MICRO PA)

EVENT	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	LEQ	DUR(A)	DUR(P)	TP
16	91.7	80.4	85.5	93.0	92.7	92.7	75.4	23.0	22.5	.0
18	92.4	80.2	84.8	90.1	91.3	91.3	76.7	24.0	25.0	.0
19	92.1	81.3	86.1	90.8	93.2	93.2	76.9	21.0	21.0	.0
20	95.1	84.6	90.4	94.0	97.0	97.0	80.2	16.5	17.5	.0
26	92.5	84.1	88.2	88.3	95.2	95.2	80.6	10.5	14.0	.0
27	91.3	82.8	87.1	87.6	94.3	94.9	79.3	10.0	12.0	1.0
28	89.6	81.0	85.9	87.1	91.5	92.5	77.1	12.0	12.0	.0
31	95.6	86.6	91.2	93.1	97.9	97.9	83.1	11.5	13.0	.0
32	92.0	84.8	89.2	88.7	96.2	96.2	82.1	7.5	8.5	.0
33	90.4	80.9	85.7	87.3	92.5	92.5	77.2	14.5	14.5	.0
34	91.4	83.5	87.8	87.8	94.9	94.9	79.4	11.5	11.5	.0

CENTERLINE MICROPHONE - SOFT SITE  
(LEVELS-DB RE 20 MICRO PA)

EVENT	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	LEQ	DUR(A)	DUR(P)	TP
32	89.2	81.0	85.7	86.4	92.3	92.3	77.6	10.5	10.5	.0
33	88.1	78.8	83.4	85.8	90.6	90.6	75.6	11.0	12.5	.0
34	88.9	80.5	85.5	86.6	92.0	92.0	78.2	8.5	8.5	.0

# TABLE F-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 32, 115 KT. FLY BY, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	65.7	71.3	79.7	78.3	78.3	12.6	5.6
2	67.4	72.8	80.6	79.6	79.6	12.2	5.4
3	71.7	75.9	81.6	82.7	84.0	11.0	4.2
4	73.2	77.1	82.2	84.1	84.1	10.9	3.9
5	74.9	78.5	83.0	85.4	86.9	10.5	3.6
6	75.5	79.0	83.6	86.2	87.9	10.7	3.5
7	77.6	81.6	84.9	88.5	88.5	10.9	4.0
8	79.8	83.9	86.2	90.4	90.4	10.6	4.1
9	80.9	85.1	87.2	91.7	91.9	11.0	4.2
10	82.5	86.4	88.4	93.3	93.3	10.8	3.9
OH → 11	83.5	87.4	89.2	94.1	94.1	10.6	3.9
12	83.9	87.7	89.3	94.6	94.6	10.7	3.8
13	83.2	86.9	88.2	93.9	93.9	10.7	3.7
14	81.6	85.4	86.4	92.6	92.6	11.0	3.8
15	80.0	83.9	84.7	91.5	91.5	11.5	3.9
16	78.6	82.5	83.3	90.0	90.0	11.4	3.9
17	77.8	81.4	82.6	89.0	89.0	11.2	3.6
18	77.0	80.5	81.8	88.0	88.0	11.0	3.5
19	76.0	79.7	81.1	87.3	87.3	11.3	3.7
20	74.4	78.1	79.8	85.5	85.5	11.1	3.7
21	72.3	76.5	78.5	83.4	83.4	11.1	4.2
22	69.8	74.6	77.7	81.5	81.5	11.7	4.8
23	67.6	73.0	77.1	80.0	80.0	12.4	5.4

# TABLE F-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 33, 115 KT. FLY BY, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	65.9	72.0	80.7	79.4	79.4	13.5	6.1
2	67.7	72.7	80.8	79.9	81.1	12.2	5.0
3	69.4	73.9	80.7	80.7	82.1	11.3	4.5
4	71.4	75.6	80.2	82.3	83.3	10.9	4.2
5	72.3	76.3	80.7	83.2	83.2	10.9	4.0
6	73.0	76.9	81.1	83.7	85.4	10.7	3.9
7	74.6	78.3	82.0	85.5	87.2	10.9	3.7
8	75.9	79.8	82.5	86.6	87.8	10.7	3.9
9	76.6	80.7	82.8	87.6	87.6	11.0	4.1
10	78.0	82.0	84.2	89.2	90.4	11.2	4.0
11	79.6	83.6	85.0	90.9	92.5	11.3	4.0
12	80.9	84.6	85.9	92.1	93.3	11.2	3.7
OH → 13	80.9	85.0	86.3	92.3	92.3	11.4	4.1
14	80.4	84.7	86.6	92.3	92.3	11.9	4.3
15	79.7	84.2	86.3	92.0	92.0	12.3	4.5
16	79.3	83.6	85.7	91.2	91.2	11.9	4.3
17	78.7	82.8	84.6	90.3	90.3	11.6	4.1
18	77.5	81.6	83.7	88.9	88.9	11.4	4.1
19	76.1	80.0	82.5	87.6	87.6	11.5	3.9
20	74.3	78.3	81.5	86.0	86.0	11.7	4.0
21	73.2	77.3	80.3	84.6	84.6	11.4	4.1
22	72.8	76.8	80.8	84.1	84.1	11.3	4.0
23	72.1	76.0	80.7	83.6	83.6	11.5	3.9
24	71.6	75.6	80.3	82.8	82.8	11.2	4.0
25	70.3	74.6	78.6	81.5	81.5	11.2	4.3
26	69.4	73.8	77.8	80.8	80.8	11.4	4.4
27	67.5	72.1	77.2	79.8	79.8	12.3	4.6
28	65.9	70.8	76.3	79.0	79.0	13.1	4.9

# TABLE F-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 34, 115 KT. FLY BY, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBL	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	65.8	72.2	80.1	79.2	79.2	13.4	6.4
2	67.8	73.7	81.2	80.9	80.9	13.1	5.9
3	69.3	74.8	81.7	81.7	81.7	12.4	5.5
4	71.7	76.3	82.5	83.0	83.0	11.3	4.6
5	74.4	78.8	83.4	85.3	86.7	10.9	4.4
6	77.3	81.8	84.9	88.3	90.5	11.0	4.5
7	77.7	82.2	85.5	88.8	90.5	11.1	4.5
8	78.8	83.2	86.1	89.9	89.9	11.1	4.4
9	79.8	83.8	86.5	90.7	90.7	10.9	4.0
10	81.1	84.8	86.9	91.9	91.9	10.8	3.7
OH → 11	81.5	85.4	87.1	92.4	92.4	10.9	3.9
12	81.8	85.6	86.9	92.8	92.8	11.0	3.8
13	81.4	85.6	86.5	92.9	92.9	11.5	4.2
14	80.8	84.9	85.7	92.3	92.3	11.5	4.1
15	79.7	84.1	84.9	91.3	91.3	11.6	4.4
16	78.9	83.1	84.1	90.6	90.6	11.7	4.2
17	77.3	81.5	82.8	89.0	89.0	11.7	4.2
18	75.4	79.4	81.0	86.8	86.8	11.4	4.0
19	72.7	76.7	79.0	83.9	83.9	11.2	4.0
20	71.3	75.1	78.8	82.6	82.6	11.3	3.8
21	70.1	74.2	78.6	81.4	81.4	11.3	4.1
22	69.1	73.4	78.7	80.5	80.5	11.4	4.3
23	68.8	73.1	77.8	80.4	81.5	11.6	4.3



# TABLE F-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 32, 115 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	67.9	73.5	78.4	79.7	79.7	11.8	5.6
2	68.9	74.2	78.5	80.5	80.5	11.6	5.3
3	69.7	75.1	79.2	82.0	83.2	12.3	5.4
4	71.8	76.9	79.8	83.4	83.4	11.6	5.1
5	75.4	79.8	80.7	86.4	87.6	11.0	4.4
6	76.5	80.9	81.0	87.5	89.0	11.0	4.4
7	76.8	81.3	81.3	87.9	89.3	11.1	4.5
8	77.8	82.2	82.6	88.9	88.9	11.1	4.4
9	79.0	83.4	83.8	90.1	90.1	11.1	4.4
10	80.5	84.7	84.9	91.4	91.4	10.9	4.2
11	81.5	85.5	85.0	92.2	92.2	10.7	4.0
OH → 12	81.6	85.6	84.7	92.2	92.2	10.6	4.0
13	81.4	85.6	84.6	92.1	92.1	10.7	4.2
14	80.9	85.1	84.6	91.4	91.4	10.5	4.2
15	80.2	84.3	84.4	90.8	90.8	10.6	4.1
16	79.2	83.1	83.5	89.7	89.7	10.5	3.9
17	78.1	82.3	82.7	88.7	88.7	10.6	4.2
18	77.6	81.7	81.7	88.1	88.1	10.5	4.1
19	76.0	80.2	80.5	86.7	86.7	10.7	4.2
20	74.3	78.4	79.0	85.2	85.2	10.9	4.1
21	72.4	76.6	77.7	83.5	83.5	11.1	4.2
22	71.3	75.7	76.7	82.3	82.3	11.0	4.4
23	69.3	74.2	75.7	81.0	82.2	11.7	4.9
24	67.6	73.0	74.6	79.6	79.6	12.0	5.4
25	66.2	72.1	75.0	78.7	78.7	12.5	5.9

# TABLE F-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 33, 115 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	63.8	71.6	78.7	77.8	77.3	14.0	7.8
2	68.6	74.0	80.0	80.8	82.4	12.2	5.4
3	70.9	75.6	81.2	82.3	83.7	11.4	4.7
4	71.7	76.4	82.2	82.9	83.8	11.1	4.7
5	73.3	77.8	82.7	84.3	84.3	11.0	4.5
6	75.9	80.1	83.2	86.7	86.7	10.8	4.2
7	76.4	80.7	83.2	87.3	87.3	10.9	4.3
8	75.2	79.8	82.6	86.5	86.5	11.3	4.6
9	71.6	77.2	81.4	83.7	83.7	12.1	5.6
10	70.8	75.8	80.6	82.1	83.5	11.3	5.0
11	72.6	76.7	80.4	83.5	86.1	10.9	4.1
12	73.8	77.6	80.7	84.6	86.6	10.8	3.8
13	75.1	79.1	80.9	85.9	87.0	10.8	4.0
14	78.0	82.3	82.4	89.1	89.1	11.1	4.3
15	79.9	83.8	83.4	90.5	90.5	10.6	3.9
16	81.0	84.9	84.4	91.5	91.5	10.5	3.9
17	81.4	85.1	84.9	91.5	91.5	10.1	3.7
OH → 18	81.7	85.4	85.1	91.7	91.7	10.0	3.7
19	80.9	84.6	84.8	90.8	90.8	9.9	3.7
20	79.8	83.5	84.3	89.8	89.8	10.0	3.7
21	78.2	82.2	83.7	88.6	88.6	10.4	4.0
22	77.6	81.9	83.3	88.3	88.3	10.7	4.3
23	76.7	81.3	82.6	87.5	87.5	10.8	4.6
24	75.2	80.1	81.8	86.5	86.5	11.3	4.9
25	74.4	79.0	81.3	85.9	85.9	11.5	4.6
26	73.5	78.0	80.7	85.1	85.1	11.6	4.5
27	73.7	77.9	80.2	84.8	84.8	11.1	4.2
28	73.1	77.7	79.6	84.3	84.3	11.2	4.6
29	71.6	76.7	78.6	83.1	83.1	11.5	5.1
30	69.1	75.0	77.4	81.5	81.5	12.4	5.9
31	65.9	73.2	74.4	80.2	80.2	14.3	7.3
32	65.5	72.9	76.3	80.1	80.1	14.6	7.4

# TABLE F-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 34, 115 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	63.6	71.1	79.2	77.0	78.4	13.4	7.5
2	66.4	73.0	79.7	79.1	80.5	12.7	6.6
3	70.9	75.6	80.5	82.2	83.4	11.3	4.7
4	73.1	77.2	80.6	83.6	83.6	10.5	4.1
5	73.6	77.8	80.4	84.0	84.0	10.4	4.2
6	72.6	77.1	79.9	83.7	83.7	11.1	4.5
7	72.5	77.3	79.6	83.8	84.9	11.3	4.8
8	74.4	78.5	80.1	85.1	86.6	10.7	4.1
9	76.3	81.0	80.8	87.1	88.1	10.8	4.7
10	78.5	83.1	82.7	89.2	90.2	10.7	4.6
11	79.9	84.8	83.9	90.7	91.8	10.8	4.9
12	81.5	85.7	85.1	91.9	91.9	10.4	4.2
13	81.2	85.3	85.1	91.6	91.6	10.4	4.1
14	80.7	84.6	84.7	91.0	91.0	10.3	3.9
15	80.2	84.5	84.4	90.8	90.8	10.6	4.3
16	81.1	85.0	84.7	91.2	91.2	10.1	3.9
17	81.0	85.2	84.9	91.2	91.2	10.2	4.2
18	82.8	86.6	86.4	92.8	92.8	10.0	3.8
OH → 19	83.0	86.7	86.5	93.2	93.2	10.2	3.7
20	83.1	86.6	86.2	93.1	93.1	10.0	3.5
21	80.8	84.2	83.7	90.7	90.7	9.9	3.4
22	78.6	82.1	81.6	88.4	88.4	9.8	3.5
23	76.3	79.6	79.8	86.0	86.0	9.7	3.3
24	75.8	79.2	79.3	85.6	85.6	9.8	3.4
25	74.6	78.0	78.3	84.6	85.9	10.0	3.4
26	73.2	77.1	77.4	83.3	84.5	10.1	3.9
27	70.7	75.2	76.5	81.8	81.8	11.1	4.5
28	70.2	75.0	76.7	81.6	81.6	11.4	4.8
29	68.7	73.6	76.4	80.1	80.1	11.4	4.9

TABLE F-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 16, 9 DEGREE APPROACH, CENTERLINE MIC. ( HARD SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	62.3	69.3	78.1	77.0	77.0	14.7	7.0
3	64.0	69.9	79.0	77.5	78.5	13.5	5.9
5	65.6	70.9	79.6	78.5	80.2	12.9	5.3
7	69.6	74.4	79.7	82.2	82.2	12.6	4.8
9	74.0	78.8	82.1	86.1	86.1	12.1	4.8
11	69.5	74.8	81.6	82.5	82.5	13.0	5.3
13	68.1	73.9	82.7	80.9	82.2	12.8	5.8
15	68.1	73.9	82.7	81.1	81.1	13.0	5.8
17	67.6	73.5	83.2	81.3	82.3	13.7	5.9
19	68.3	74.5	84.1	82.1	83.1	13.8	6.2
21	69.3	75.3	84.4	82.9	82.9	13.6	6.0
23	70.7	76.5	85.7	83.5	84.7	12.8	5.8
25	73.2	78.6	85.9	85.9	87.8	12.7	5.4
27	73.3	78.8	86.6	86.3	87.7	13.0	5.5
29	73.0	79.0	87.4	86.3	86.3	13.3	6.0
31	72.4	78.8	88.3	86.2	86.2	13.8	6.4
33	73.4	80.0	90.5	86.9	86.9	13.5	6.6
35	76.0	82.3	92.2	88.6	88.6	12.6	6.3
37	77.7	83.5	93.0	90.4	90.4	12.7	5.8
OH 39 → 40	79.5	85.0	91.0	92.3	92.3	12.8	5.5
41	79.9	85.4	88.3	92.7	92.7	12.8	5.5
43	80.4	85.3	88.3	92.4	92.4	12.0	4.9
45	80.4	85.3	89.3	92.4	92.4	12.0	4.9
47	78.0	83.2	87.3	90.4	90.4	12.4	5.2
49	74.4	79.6	83.5	86.3	86.3	11.9	5.2
51	71.9	77.0	81.0	83.5	83.5	11.6	5.1
53	70.4	75.1	79.2	82.0	82.0	11.6	4.7
55	69.1	74.3	77.6	81.2	82.2	12.1	5.2
57	67.0	72.2	77.4	79.1	79.1	12.1	5.2
59	66.7	71.8	77.4	78.8	78.8	12.1	5.1

# TABLE F-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 18, 60 KT. FLY BY, CENTERLINE MIC. ( HARD SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	62.3	69.3	77.2	76.3	76.3	14.0	7.0
3	63.5	69.9	78.0	77.3	77.3	13.8	6.4
5	67.1	72.6	79.0	79.8	79.8	12.7	5.5
7	70.8	75.2	79.8	83.1	83.1	12.3	4.4
9	76.5	80.5	82.7	87.9	89.5	11.4	4.0
11	77.8	81.6	82.9	88.2	89.7	10.4	3.8
13	76.1	80.1	81.7	87.1	89.2	11.0	4.0
15	73.1	77.3	81.0	85.0	86.0	11.9	4.2
17	71.0	75.8	80.8	83.2	84.2	12.2	4.8
19	69.7	74.6	80.8	81.6	81.6	11.9	4.9
21	74.3	78.4	81.3	85.8	87.8	11.5	4.1
23	75.2	79.4	83.0	86.5	88.2	11.3	4.2
25	74.7	79.4	84.3	86.9	86.9	12.2	4.7
27	76.0	80.5	83.5	87.7	89.2	11.7	4.5
29	76.8	81.4	84.0	88.1	89.1	11.3	4.6
31	78.1	82.8	85.0	89.6	89.6	11.5	4.7
33	78.9	83.7	86.2	90.7	90.7	11.8	4.8
35	79.7	84.4	87.3	91.2	91.2	11.5	4.7
37	80.0	84.8	87.7	91.3	91.3	11.3	4.8
OH → 39	80.2	84.4	88.7	91.2	91.2	11.0	4.2
41	79.1	83.5	89.7	90.3	90.3	11.2	4.4
43	78.0	82.3	90.1	89.0	89.0	11.0	4.3
45	77.3	81.3	89.3	87.9	87.9	10.6	4.0
47	76.5	80.4	87.5	87.1	87.1	10.6	3.9
49	75.1	79.2	85.9	86.0	86.0	10.9	4.1
51	74.2	78.4	84.1	85.1	85.1	10.9	4.2
53	72.6	77.1	82.5	83.9	83.9	11.3	4.5
55	69.1	73.6	80.7	80.9	80.9	11.8	4.5
57	66.0	71.6	80.3	78.7	78.7	12.7	5.6
59	66.0	71.1	78.8	78.1	78.1	12.1	5.1
61	64.9	69.7	77.1	76.9	78.5	12.0	4.8

*TABLE F-V*  
NOISE LEVEL TIME HISTORY DATA  
SIKORSKY S-61

OCTOBER 28 1976

EVENT 19, 60 KT. FLY BY, CENTERLINE MIC. ( HARD SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	63.6	71.2	76.9	78.2	78.2	14.6	7.6
3	62.8	70.7	77.2	78.6	78.6	15.8	7.9
5	64.8	72.2	78.0	80.0	80.0	15.2	7.4
7	70.8	75.5	80.1	83.0	84.1	12.2	4.7
9	74.3	77.9	81.4	86.2	86.2	11.9	3.6
11	70.2	75.2	79.8	82.7	82.7	12.5	5.0
13	66.9	73.0	78.7	80.7	82.1	13.8	6.1
15	66.7	73.0	78.6	80.5	82.2	13.8	6.3
17	68.1	74.1	79.6	81.1	81.1	13.0	6.0
19	67.7	73.9	80.5	81.4	82.7	13.7	6.2
21	71.6	76.3	81.3	84.0	85.6	12.4	4.7
23	73.2	77.8	82.2	85.2	85.2	12.0	4.6
25	75.0	79.9	84.2	87.5	87.5	12.5	4.9
27	76.3	81.1	85.5	88.8	88.8	12.5	4.8
29	77.4	82.5	85.6	89.7	89.7	12.3	5.1
31	77.2	82.1	85.8	89.0	89.0	11.8	4.9
33	80.4	85.5	87.2	92.3	92.3	11.9	5.1
35	80.6	85.4	88.1	92.7	92.7	12.1	4.8
OH 37 → 38	81.3	86.1	90.0	93.2	93.2	11.9	4.8
39	80.9	85.8	90.8	92.5	92.5	11.6	4.9
41	81.2	84.7	90.8	91.3	91.3	11.1	4.5
43	76.7	81.0	89.8	87.8	87.8	11.1	4.3
45	76.1	80.2	88.2	86.8	86.8	10.7	4.1
47	75.7	79.9	87.0	86.7	86.7	11.0	4.2

# TABLE F-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 20, 6 DEGREE APPROACH, CENTERLINE MIC. ( HARD SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	70.5	77.0	84.6	84.3	85.3	13.8	6.5
2	71.1	77.5	84.8	84.7	85.8	13.6	6.4
3	72.3	78.0	84.9	85.4	86.5	13.1	5.7
4	74.2	79.2	85.2	86.5	87.7	12.3	5.0
5	75.2	79.9	85.6	87.3	87.3	12.1	4.7
6	75.8	80.5	86.0	88.0	88.0	12.2	4.7
7	76.0	80.9	86.6	88.2	89.9	12.2	4.9
8	75.9	81.2	87.9	88.3	90.2	12.4	5.3
9	75.4	81.2	88.4	88.6	90.1	13.2	5.8
10	75.3	81.0	88.6	88.7	88.7	13.4	5.7
11	75.1	81.0	88.9	88.6	88.6	13.5	5.9
12	75.4	81.5	89.0	88.9	88.9	13.5	6.1
13	76.1	82.5	89.2	89.7	89.7	13.6	6.4
14	78.7	84.3	89.2	91.3	91.3	12.6	5.6
15	79.2	84.9	89.4	92.0	92.0	12.8	5.7
16	79.8	85.4	89.6	92.6	92.6	12.8	5.6
17	80.3	86.0	89.9	92.9	92.9	12.6	5.7
18	80.9	86.7	90.1	93.5	93.5	12.6	5.8
19	81.4	87.2	90.1	94.0	94.0	12.6	5.8
20	81.3	87.0	89.8	94.2	94.2	12.9	5.7
OH → 21	81.9	87.6	90.0	94.6	94.6	12.7	5.7
22	82.5	88.1	90.9	95.3	95.3	12.8	5.6
23	83.5	89.1	92.3	96.0	96.0	12.5	5.6
24	84.1	89.8	93.4	96.4	96.4	12.3	5.7
25	84.2	90.1	93.9	96.7	96.7	12.5	5.9
26	84.6	90.4	94.0	97.0	97.0	12.4	5.8
27	84.1	89.7	93.2	96.3	96.3	12.2	5.6
28	83.4	89.0	92.2	95.8	95.8	12.4	5.6
29	81.4	87.2	90.4	94.3	94.3	12.9	5.8
30	80.1	85.9	89.2	93.0	93.0	12.9	5.8
31	78.7	84.4	87.5	91.4	91.4	12.7	5.7
32	77.9	83.4	86.3	90.6	90.6	12.7	5.5
33	76.6	82.4	85.0	89.4	89.4	12.8	5.8
34	75.3	80.9	83.6	88.0	88.0	12.7	5.6
35	75.1	80.2	82.6	87.5	87.5	12.4	5.1
36	74.8	79.6	81.9	87.2	88.5	12.4	4.8
37	73.9	78.6	81.0	86.3	86.3	12.4	4.7
38	71.8	76.8	80.0	84.3	84.3	12.5	5.0
39	70.3	75.8	79.2	83.0	83.0	12.7	5.5

# TABLE F-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 26, 100 KT. FLY BY, CENTERLINE MIC. ( HARD SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	70.5	78.0	84.5	85.0	85.0	14.5	7.5
2	71.4	78.4	84.1	85.5	85.5	14.1	7.0
3	72.0	79.1	84.4	86.4	87.6	14.4	7.1
4	73.6	79.7	85.3	87.5	87.5	13.9	6.1
5	75.3	80.8	85.6	88.7	90.2	13.4	5.5
6	76.7	81.5	86.0	89.2	91.0	12.5	4.8
7	78.0	82.5	85.9	89.9	89.9	11.9	4.5
8	79.4	83.5	86.0	90.6	90.6	11.2	4.1
9	80.7	85.1	86.0	91.5	91.5	10.8	4.4
10	81.5	85.8	85.5	91.9	91.9	10.4	4.3
11	82.2	86.8	86.4	93.4	93.4	11.2	4.6
12	83.4	87.6	87.4	94.5	94.5	11.1	4.2
13	84.0	88.2	88.2	95.2	95.2	11.2	4.2
OH → 14	84.1	88.2	88.3	94.9	94.9	10.8	4.1
15	83.6	87.8	88.2	94.5	94.5	10.9	4.2
16	82.8	87.1	87.8	93.9	93.9	11.1	4.3
17	82.0	86.1	87.2	93.0	93.0	11.0	4.1
18	80.5	85.0	86.1	91.7	91.7	11.2	4.5
19	79.3	83.8	85.5	90.7	90.7	11.4	4.5
20	77.9	82.7	84.9	89.6	89.6	11.7	4.8
21	77.2	82.0	84.4	89.0	89.0	11.8	4.8
22	76.6	81.2	83.2	88.4	88.4	11.8	4.6
23	75.3	80.3	82.4	87.5	87.5	12.2	5.0
24	73.3	78.7	81.8	86.1	86.1	12.8	5.4
25	70.9	77.6	81.2	84.5	84.5	13.6	6.7
26	69.4	76.9	81.8	83.9	83.9	14.5	7.5
27	69.6	77.3	82.4	84.0	85.2	14.4	7.7



# TABLE F-II

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 27, 100 KT. FLY BY, CENTERLINE MIC. ( HARD SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB · RE 20 MICRO PA)

INT	DBA	DBD	JASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	72.0	77.6	84.5	84.2	85.3	12.2	5.6
2	72.2	78.0	84.3	84.7	84.7	12.5	5.8
3	72.5	78.5	84.5	85.6	85.6	13.1	6.0
4	73.1	78.9	84.6	86.0	86.0	12.9	5.8
5	72.8	78.9	84.6	85.8	85.8	13.0	6.1
6	73.9	80.4	84.3	86.7	88.2	12.8	6.5
7	74.8	80.9	84.7	87.1	89.2	12.3	6.1
8	76.2	81.6	85.2	88.2	89.3	12.0	5.4
9	77.4	82.2	85.5	89.3	89.3	11.9	4.8
10	78.6	83.6	86.2	90.5	90.5	11.9	5.0
11	80.6	85.3	86.8	92.3	93.5	11.7	4.7
12	82.4	86.9	87.6	93.9	94.9	11.5	4.5
13	82.8	87.1	87.6	94.3	94.3	11.5	4.3
OH → 14	82.5	86.7	86.8	93.9	93.9	11.4	4.2
15	81.7	85.9	86.0	93.2	93.2	11.5	4.2
16	81.5	85.7	85.9	92.8	92.8	11.3	4.2
17	81.2	85.1	85.9	92.1	92.1	10.9	3.9
18	80.4	84.2	85.3	90.9	90.9	10.5	3.8
19	79.3	83.0	84.4	89.5	89.5	10.2	3.7
20	78.1	81.8	83.3	88.3	88.3	10.2	3.7
21	76.7	80.2	82.5	87.0	87.0	10.3	3.5
22	75.4	78.8	81.8	85.9	85.9	10.5	3.4
23	73.5	77.3	80.9	84.3	84.3	10.8	3.8
24	71.1	75.5	79.7	82.3	82.3	11.2	4.4
25	69.6	74.3	78.9	80.9	80.9	11.3	4.7
26	70.0	74.2	78.6	80.9	80.9	10.9	4.2

# TABLE F-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 28, 100 KT. FLY BY, CENTERLINE MIC. ( HARD SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB, RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	66.6	73.1	83.7	79.0	80.8	12.4	6.5
2	67.5	73.4	82.5	79.7	81.6	12.2	5.9
3	69.0	74.5	82.4	81.0	81.0	12.0	5.5
4	71.0	75.9	83.8	82.4	82.4	11.4	4.9
5	71.2	76.2	84.2	82.7	82.7	11.5	5.0
6	72.4	77.0	84.6	83.9	83.9	11.5	4.6
7	72.6	77.2	84.2	84.5	84.5	11.9	4.6
8	73.2	77.7	84.5	85.1	86.8	11.9	4.5
9	74.1	78.7	84.7	85.9	88.1	11.8	4.6
10	74.8	79.7	85.0	87.1	88.2	12.3	4.9
11	75.3	80.3	85.1	87.9	87.9	12.6	5.0
12	75.7	80.6	84.8	88.0	88.0	12.3	4.9
13	76.5	81.5	85.9	88.7	88.7	12.2	5.0
14	77.8	82.8	86.4	89.5	89.5	11.7	5.0
15	80.0	85.1	87.1	91.8	91.8	11.8	5.1
16	80.6	85.7	86.6	92.4	92.4	11.8	5.1
17	81.0	85.9	86.5	92.5	92.5	11.5	4.9
OH → 18	80.5	85.3	86.3	91.9	91.9	11.4	4.8
19	80.5	84.8	86.3	91.8	91.8	11.3	4.3
20	79.6	83.9	86.1	91.0	91.0	11.4	4.3
21	78.6	82.6	85.5	89.5	89.5	10.9	4.0
22	77.5	81.6	85.3	88.2	88.2	10.7	4.1
23	76.6	80.3	84.5	86.9	86.9	10.3	3.7
24	75.3	79.3	83.7	85.9	85.9	10.6	4.0
25	73.8	77.7	82.0	84.8	84.8	11.0	3.9
26	72.3	76.4	80.8	83.6	83.6	11.3	4.1
27	70.8	74.9	79.8	81.7	81.7	10.9	4.1
28	68.9	73.2	78.9	80.3	80.3	11.4	4.3
29	68.5	72.9	79.2	79.7	79.7	11.2	4.4
30	69.2	73.6	79.6	80.5	81.5	11.3	4.4

TABLE F-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 31, 3 DEGREE APPROACH, CENTERLINE MIC. ( HARD SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	69.6	76.9	84.7	84.9	84.9	15.3	7.3
2	70.8	77.7	84.7	85.7	85.7	14.9	6.9
3	73.5	78.8	83.9	87.0	87.0	13.5	5.3
4	76.8	81.6	84.5	89.6	89.6	12.8	4.8
5	77.9	82.6	85.3	90.5	90.5	12.6	4.7
6	77.8	82.9	85.4	90.5	90.5	12.7	5.1
7	77.0	82.3	84.9	89.6	89.6	12.6	5.3
8	80.7	85.0	86.9	91.6	91.6	10.9	4.3
9	82.9	87.4	89.1	94.0	95.4	11.1	4.5
10	84.6	89.1	90.4	95.5	95.5	10.9	4.5
11	84.6	89.4	90.8	96.3	96.3	11.7	4.8
12	85.0	90.0	91.0	96.7	96.7	11.7	5.0
13	86.6	91.2	91.7	97.8	97.8	11.2	4.6
14	86.2	91.0	91.3	97.9	97.9	11.7	4.8
15	85.9	90.8	91.2	97.7	97.7	11.8	4.9
16	83.9	89.2	90.6	96.1	96.1	12.2	5.3
17	84.3	89.4	91.2	96.2	96.2	11.9	5.1
CH → 18	84.1	88.9	91.9	96.0	96.0	11.9	4.8
19	84.6	89.4	92.7	96.4	96.4	11.8	4.8
20	84.8	89.4	93.1	96.3	96.3	11.5	4.6
21	83.9	88.5	92.9	95.4	95.4	11.5	4.6
22	82.3	86.8	92.1	93.7	93.7	11.4	4.5
23	79.8	84.6	90.8	91.4	91.4	11.6	4.8
24	78.4	83.5	89.3	90.5	90.5	12.1	5.1
25	77.3	82.7	88.6	89.7	89.7	12.4	5.4
26	76.9	82.6	88.0	89.7	89.7	12.8	5.7
27	76.0	82.1	87.0	89.3	89.3	13.3	6.1
28	74.7	81.3	85.3	88.4	88.4	13.7	6.6
29	72.7	79.4	83.7	86.1	86.1	13.4	6.7

# TABLE F-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 32, 115 KT. FLY BY, CENTERLINE MIC. ( HARD SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	70.4	76.0	81.9	82.4	83.9	12.0	5.6
2	71.8	76.7	82.0	83.5	84.5	11.7	4.9
3	73.6	78.0	82.3	84.8	86.5	11.2	4.4
4	76.0	80.1	82.9	87.0	87.0	11.0	4.1
5	80.5	83.7	85.4	90.6	90.6	10.1	3.2
6	82.1	85.6	86.5	92.2	92.2	10.1	3.5
7	84.1	87.7	87.9	94.4	94.4	10.3	3.6
8	84.2	88.4	87.9	95.0	95.0	10.8	4.2
9	84.8	89.2	88.5	96.0	96.0	11.2	4.4
OH → 10	84.7	89.0	88.4	96.2	96.2	11.5	4.3
11	84.7	88.8	88.7	96.1	96.1	11.4	4.1
12	83.3	87.1	87.6	94.5	94.5	11.2	3.8
13	81.5	85.7	86.2	92.8	92.8	11.3	4.2
14	80.1	84.2	84.9	91.4	91.4	11.3	4.1
15	80.1	83.9	84.3	91.0	91.0	10.9	3.8
16	79.2	82.8	83.6	89.7	89.7	10.5	3.6
17	77.2	80.9	81.7	87.8	87.8	10.6	3.7
18	74.9	78.8	80.6	85.7	85.7	10.8	3.9
19	73.4	77.4	80.2	84.2	84.2	10.8	4.0
20	72.2	76.4	79.6	83.0	83.0	10.8	4.2
21	71.5	75.7	78.6	82.1	82.1	10.6	4.2

# TABLE F-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 33, 115 KT. FLY BY, CENTERLINE MIC. ( HARD SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	67.1	72.5	81.3	79.3	80.5	12.2	5.4
2	66.1	72.2	81.5	79.0	79.0	12.9	6.1
3	69.1	74.5	82.0	81.4	81.4	12.3	5.4
4	71.8	76.6	83.4	83.5	83.5	11.7	4.8
5	72.9	77.6	84.4	84.3	84.3	11.4	4.7
6	73.2	77.8	84.5	85.1	85.1	11.9	4.6
7	72.7	77.5	84.3	85.0	85.0	12.3	4.8
8	72.0	76.9	83.9	84.4	85.6	12.4	4.9
9	72.1	77.1	84.1	83.9	83.9	11.8	5.0
10	72.5	77.9	84.4	84.5	85.7	12.0	5.4
11	73.8	79.3	84.7	85.6	87.5	11.8	5.5
12	75.9	80.9	84.8	87.4	87.4	11.5	5.0
13	77.1	81.8	84.7	88.4	88.4	11.3	4.7
14	78.3	82.8	85.3	89.5	89.5	11.2	4.5
15	78.9	83.5	86.0	90.2	90.2	11.3	4.6
16	80.3	84.9	87.2	91.6	91.6	11.3	4.6
17	80.7	85.4	87.3	92.1	92.1	11.4	4.7
18	80.9	85.7	87.0	92.5	92.5	11.6	4.8
OH → 19	80.5	85.4	86.1	92.3	92.3	11.8	4.9
20	80.5	85.3	86.3	92.2	92.2	11.7	4.8
21	80.5	85.2	86.5	92.0	92.0	11.5	4.7
22	79.9	84.3	86.4	91.2	91.2	11.3	4.4
23	78.7	83.0	85.2	89.9	89.9	11.2	4.3
24	77.7	81.6	84.2	88.7	88.7	11.0	3.9
25	77.0	80.4	83.4	87.6	87.6	10.6	3.4
26	76.3	79.8	82.9	87.0	87.0	10.7	3.5
27	75.2	79.0	82.2	86.2	86.2	11.0	3.8
28	74.7	78.7	81.8	85.9	85.9	11.2	4.0
29	74.5	78.4	81.3	85.8	85.8	11.3	3.9
30	73.9	77.8	81.1	85.0	85.0	11.1	3.9
31	72.8	76.6	80.6	83.8	83.8	11.0	3.8
32	70.8	74.8	80.4	82.1	82.1	11.3	4.0
33	68.4	73.0	80.0	80.2	81.4	11.8	4.6
34	66.7	72.3	81.2	79.4	79.4	12.7	5.6
35	66.0	72.7	83.0	79.8	81.3	13.8	6.7

# TABLE F-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 34, 115 KT. FLY BY, CENTERLINE MIC. ( HARD SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	70.5	75.7	81.7	83.5	86.4	13.0	5.2
2	72.7	77.7	81.8	85.3	88.0	12.6	5.0
3	73.4	78.3	81.3	85.9	88.4	12.5	4.9
4	73.2	78.0	81.1	85.8	88.4	12.6	4.8
5	75.2	79.5	81.3	86.7	88.9	11.5	4.3
6	76.8	80.7	82.3	87.4	88.6	10.6	3.9
7	77.1	81.2	82.5	87.5	89.0	10.4	4.1
8	78.2	82.1	82.9	88.4	88.4	10.2	3.9
9	79.9	83.8	83.5	89.8	89.8	9.9	3.9
10	81.2	84.9	85.3	91.1	91.1	9.9	3.7
11	82.5	86.4	86.7	92.7	92.7	10.2	3.9
12	83.3	87.6	87.8	94.3	94.3	11.0	4.3
OH → 13	83.5	87.8	87.7	94.9	94.9	11.4	4.3
14	83.0	87.5	87.6	94.7	94.7	11.7	4.5
15	82.3	86.8	87.3	94.0	94.0	11.7	4.5
16	81.5	86.0	86.8	93.1	93.1	11.6	4.5
17	80.4	84.8	85.9	91.9	91.9	11.5	4.4
18	79.0	83.0	84.7	90.2	90.2	11.2	4.0
19	78.0	82.0	83.9	88.9	88.9	10.9	4.0
20	76.2	80.3	82.7	86.9	86.9	10.7	4.1
21	74.7	78.9	81.8	85.8	85.8	11.1	4.2
22	73.6	78.1	80.8	85.0	85.0	11.4	4.5
23	73.0	77.4	79.7	83.9	83.9	10.9	4.4
24	72.5	76.6	78.4	83.2	83.2	10.7	4.1
25	73.0	76.5	78.7	83.2	84.3	10.2	3.5
26	73.5	76.7	78.9	83.2	84.3	9.7	3.2
27	72.7	76.0	79.3	82.2	82.2	9.5	3.3
28	70.3	74.1	80.6	80.6	81.7	10.3	3.8
29	66.3	71.3	81.4	78.1	79.2	11.8	5.0

# TABLE F-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 32, 115 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	61.4	68.2	79.3	75.0	75.0	13.6	6.8
2	65.4	70.8	78.7	77.8	77.8	12.4	5.4
3	68.4	73.0	78.9	79.7	80.7	11.3	4.6
4	71.4	76.2	79.3	82.7	84.6	11.3	4.8
5	71.6	76.4	80.0	83.0	84.9	11.4	4.8
6	72.6	77.5	80.3	84.2	85.9	11.6	4.9
7	73.6	78.3	80.7	85.2	85.2	11.6	4.7
8	75.7	80.8	81.1	87.5	87.5	11.8	5.1
9	77.2	82.1	81.9	88.8	88.8	11.6	4.9
10	78.7	83.7	83.0	90.0	91.0	11.3	5.0
11	80.3	85.1	84.9	91.6	91.6	11.3	4.8
12	81.0	85.7	85.7	92.3	92.3	11.3	4.7
OH → 13	80.9	85.4	86.2	92.2	92.2	11.3	4.5
14	80.7	85.3	86.4	92.0	92.0	11.3	4.6
15	80.5	85.1	86.4	91.8	91.8	11.3	4.6
16	80.1	84.6	85.8	91.4	91.4	11.3	4.5
17	79.1	83.2	84.5	90.0	90.0	10.9	4.1
18	77.9	81.9	83.2	88.7	88.7	10.8	4.0
19	76.9	80.9	82.0	87.5	87.5	10.6	4.0
20	75.4	79.7	80.7	85.8	85.8	10.4	4.3
21	74.2	78.4	79.9	84.8	84.8	10.6	4.2
22	72.9	76.9	78.7	83.4	83.4	10.5	4.0
23	71.7	75.4	77.7	82.1	82.1	10.4	3.7
24	70.5	74.2	76.5	81.1	81.1	10.6	3.7
25	68.7	72.3	75.5	79.6	79.6	10.9	3.6
26	66.8	70.6	74.2	77.9	77.9	11.1	3.8
27	64.5	68.6	73.2	76.5	76.5	12.0	4.1

# TABLE F-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 33, 115 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	64.9	71.6	81.8	78.3	79.6	13.4	6.7
2	67.2	73.1	82.8	79.8	80.9	12.6	5.9
3	68.3	73.8	82.7	80.5	80.5	12.2	5.5
4	69.0	74.3	82.7	81.3	82.6	12.3	5.3
5	69.1	74.5	81.8	81.6	83.7	12.5	5.4
6	70.5	75.4	82.2	82.8	85.0	12.3	4.9
7	73.3	78.2	83.0	85.1	86.2	11.8	4.9
8	75.3	79.9	83.7	87.0	87.0	11.7	4.6
9	75.9	80.2	83.4	87.5	87.5	11.6	4.3
10	75.7	79.8	82.9	87.3	87.3	11.6	4.1
11	75.4	79.9	82.7	87.0	87.0	11.6	4.5
12	76.1	81.0	83.8	87.5	88.8	11.4	4.9
OH → 13	77.3	82.1	84.8	89.0	89.0	11.7	4.8
14	78.2	82.9	85.4	90.1	90.1	11.9	4.7
15	78.8	83.4	85.5	90.6	90.6	11.8	4.6
16	78.7	83.4	85.8	90.6	90.6	11.9	4.7
17	78.4	83.0	85.8	90.3	90.3	11.9	4.6
18	77.5	82.1	85.2	89.7	89.7	12.2	4.6
19	76.8	81.1	84.3	88.2	88.2	11.4	4.3
20	75.6	79.9	83.2	87.0	87.0	11.4	4.3
21	74.6	78.5	82.9	85.7	85.7	11.1	3.9
22	72.9	77.1	82.2	84.2	84.2	11.3	4.2
23	71.6	76.2	81.5	83.1	83.1	11.5	4.6
24	70.8	75.4	80.4	82.8	82.8	12.0	4.6
25	69.6	74.1	79.5	81.7	81.7	12.1	4.5
26	67.8	72.5	78.5	80.3	80.3	12.5	4.7
27	67.0	71.5	77.4	79.3	79.3	12.3	4.5
28	66.5	71.2	77.2	78.9	78.9	12.4	4.7



# TABLE F-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 34, 115 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	69.4	73.9	79.9	80.4	81.8	11.0	4.5
2	69.0	73.8	79.6	80.2	81.3	11.2	4.8
3	68.6	73.8	79.4	80.6	82.0	12.0	5.2
4	70.1	74.8	78.9	82.0	83.5	11.9	4.7
5	74.4	78.7	79.7	85.1	85.1	10.7	4.3
6	77.9	82.0	81.6	88.1	88.1	10.2	4.1
7	79.9	84.2	83.8	90.5	90.5	10.6	4.3
OH → 8	80.5	85.2	84.8	91.6	91.6	11.1	4.7
9	80.4	85.5	85.3	91.9	91.9	11.5	5.1
10	80.0	85.3	85.4	91.9	91.9	11.9	5.3
11	80.3	85.5	85.9	92.0	92.0	11.7	5.2
12	80.5	85.3	86.4	91.9	91.9	11.4	4.8
13	80.0	84.6	86.6	91.6	91.6	11.6	4.6
14	78.9	83.3	86.1	90.8	90.8	11.9	4.4
15	77.8	82.3	85.0	89.3	89.3	11.5	4.5
16	77.1	81.3	83.4	88.3	88.3	11.2	4.2
17	76.1	80.0	82.0	87.0	87.0	10.9	3.9
18	73.9	77.7	81.3	84.4	84.4	10.5	3.8
19	71.9	75.9	80.9	82.9	82.9	11.0	4.0
20	69.4	73.5	79.8	80.8	80.8	11.4	4.1
21	68.1	72.4	78.3	79.7	79.7	11.6	4.3
22	67.2	71.5	77.6	79.0	79.0	11.8	4.3
23	65.7	70.4	77.4	77.6	77.6	11.9	4.7

# TABLE F-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 32, 115 KT. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-3.5	-2.5	-1.5	-.5	0	.5	1.5	2.5	3.5	5.0
17	65.8	66.1	66.8	69.4	70.5	71.9	69.8	66.4	64.1	61.9
18	68.8	71.7	70.0	72.5	72.2	70.1	66.1	65.4	65.7	64.8
19	65.0	63.1	63.6	64.7	65.3	64.8	61.0	61.9	64.0	66.5
20	64.3	63.2	61.6	63.0	68.1	71.5	71.8	63.1	65.5	69.4
21	69.8	68.7	67.5	68.8	72.2	73.0	70.6	66.8	62.3	60.3
22	59.2	57.7	65.6	71.9	74.4	75.8	74.5	70.7	67.8	60.2
23	54.9	61.2	70.7	75.2	76.8	78.6	78.4	74.9	72.8	65.1
24	65.6	68.7	77.1	80.5	79.9	78.9	74.1	70.4	71.8	69.1
25	65.5	66.4	70.3	69.1	69.6	72.0	72.4	67.7	67.4	67.5
26	68.8	68.3	69.5	73.8	76.5	77.7	77.8	76.2	73.0	63.0
27	65.2	65.2	74.4	75.8	75.9	75.8	74.7	73.2	74.0	67.4
28	67.0	71.1	74.2	77.0	78.3	78.7	75.4	72.8	69.5	65.0
29	67.0	66.6	73.4	74.5	75.8	76.6	73.8	71.3	68.7	64.8
30	62.1	67.3	71.9	74.0	74.8	75.4	72.6	68.9	67.0	62.8
31	62.2	65.4	69.7	71.7	72.7	73.3	70.5	67.0	65.4	62.3
32	60.7	64.3	68.3	71.2	72.2	72.3	69.1	65.7	63.0	60.8
33	58.3	62.1	65.9	69.0	70.1	70.1	66.4	63.3	59.7	56.7
34	56.5	58.6	62.9	65.5	66.7	66.6	63.9	60.5	56.9	52.7
35	52.1	55.5	60.1	63.2	64.3	64.0	60.6	57.2	53.5	49.0
36	46.1	49.6	55.2	58.9	59.9	59.5	56.6	52.9	49.3	45.4
37	45.0	45.0	48.5	52.7	54.4	54.3	51.4	48.0	45.1	45.0
38	45.0	45.0	45.0	46.8	47.6	47.7	45.8	45.0	45.0	45.0
39	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
40	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
A	73.2	75.5	79.8	82.5	83.5	83.9	81.6	78.6	77.0	72.3
D	77.1	79.0	83.9	86.4	87.4	87.7	85.4	82.5	80.5	76.5
OASPL	82.2	83.6	86.2	88.4	89.2	89.3	86.4	83.3	81.8	78.5
PNL	84.1	86.2	90.4	93.3	94.1	94.6	92.6	90.0	88.0	83.4
PNLT	84.1	87.9	90.4	93.3	94.1	94.6	92.6	90.0	88.0	83.4

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE F-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 33, 115 KT. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-5.0	-3.5	-2.0	-.5	0	1.0	2.5	4.0	5.5
17	64.0	65.0	69.3	68.7	69.7	69.2	66.0	65.4	67.4
18	68.3	66.9	68.4	70.9	70.3	68.0	65.5	67.1	68.5
19	61.7	63.5	66.3	63.0	63.2	63.0	63.2	64.9	66.3
20	59.2	60.2	62.7	66.5	70.1	75.6	67.6	64.3	66.1
21	70.9	69.6	69.2	74.4	75.6	74.2	69.2	66.4	64.6
22	58.1	56.8	63.3	69.0	71.1	73.7	71.3	64.7	58.7
23	50.8	56.6	68.7	72.1	72.9	74.7	75.1	70.5	63.0
24	60.2	67.4	73.6	76.7	75.7	69.9	67.6	67.1	66.3
25	59.7	64.4	67.4	67.6	69.1	72.3	71.5	63.6	66.2
26	64.9	66.7	65.8	74.1	74.2	71.8	74.1	69.3	64.4
27	60.3	61.4	70.4	75.0	77.0	77.7	73.2	67.7	66.8
28	59.4	68.6	70.9	77.3	76.4	71.8	69.4	66.1	65.1
29	63.0	65.8	67.2	72.5	73.0	72.2	69.6	65.1	64.7
30	58.7	64.5	67.6	71.9	71.9	71.3	68.0	63.7	62.2
31	60.9	61.7	65.8	69.9	70.0	69.2	66.0	62.2	61.0
32	57.2	60.9	65.4	69.4	69.5	68.7	64.4	60.3	58.8
33	56.1	58.6	63.3	66.2	66.6	65.8	61.7	57.0	54.8
34	52.5	55.7	61.3	64.3	64.6	62.5	59.1	54.4	52.3
35	48.2	51.8	57.6	62.0	62.0	60.0	56.2	51.6	48.9
36	45.0	46.0	54.1	57.8	57.9	56.2	52.3	47.9	45.2
37	45.0	45.0	48.0	52.2	52.7	50.8	47.8	45.0	45.0
38	45.0	45.0	45.0	45.5	46.0	45.4	45.0	45.0	45.0
39	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
40	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
A	69.4	73.0	76.6	80.9	80.9	79.7	77.5	73.2	71.6
D	73.9	76.9	80.7	84.6	85.0	84.2	81.6	77.3	75.6
OASPL	80.7	81.1	82.8	85.9	86.3	86.3	83.7	80.3	80.3
PNL	80.7	83.7	87.6	92.1	92.3	92.0	88.9	84.6	82.8
PNLT	82.1	85.4	87.6	93.3	92.3	92.0	88.9	84.6	82.8

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE F-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 34, 115 KT. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-4.0	-3.0	-2.0	-1.0	0	1.0	2.0	3.0	4.5
17	65.8	65.4	66.0	65.4	67.3	69.5	68.2	66.7	64.5
18	69.3	67.4	68.3	67.2	66.8	63.8	64.3	62.4	60.4
19	65.4	66.5	65.5	65.3	64.4	61.5	61.9	61.1	62.7
20	64.6	66.6	66.6	62.3	69.2	75.9	72.4	60.9	66.7
21	72.6	71.8	71.1	64.4	73.4	73.7	70.2	65.4	54.6
22	62.1	58.3	60.8	66.7	72.5	74.2	73.2	69.8	61.0
23	57.6	59.1	67.6	72.5	74.9	76.4	76.2	75.0	67.3
24	63.1	68.3	73.6	77.6	78.3	73.8	69.6	70.2	66.6
25	61.6	67.0	70.4	68.4	68.9	73.6	72.9	67.8	64.6
26	63.4	67.2	69.0	70.8	75.3	75.7	76.7	75.8	64.1
27	62.7	63.3	69.0	74.0	75.3	77.5	75.9	71.7	67.6
28	60.3	69.5	73.4	73.8	75.9	74.1	72.1	71.6	64.4
29	62.2	67.2	67.7	71.8	74.2	73.5	71.1	69.5	63.9
30	60.1	64.9	69.0	71.9	73.8	72.4	69.7	66.8	60.7
31	57.9	62.7	67.3	70.0	71.6	70.3	67.8	65.2	59.6
32	57.8	63.1	67.2	68.1	69.8	69.8	67.1	63.4	58.4
33	56.7	60.3	65.3	66.1	67.2	67.4	64.7	60.6	55.1
34	53.0	58.1	62.7	63.6	65.1	65.2	63.0	58.6	51.0
35	49.6	54.3	59.0	61.2	62.1	61.8	59.6	55.8	48.1
36	45.0	50.2	54.4	56.8	57.9	58.0	55.4	51.5	45.5
37	45.0	45.5	49.3	50.3	52.8	52.6	49.9	47.0	45.0
38	45.0	45.0	45.0	45.1	46.5	47.3	45.6	45.0	45.0
39	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
40	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
A	69.3	74.4	77.7	79.8	81.5	81.4	79.7	77.3	71.3
D	74.8	78.8	82.2	83.8	85.4	85.6	84.1	81.5	75.1
OASPL	81.7	83.4	85.5	86.5	87.1	86.5	84.9	82.8	78.8
PNL	81.7	85.3	88.8	90.7	92.4	92.9	91.3	89.0	82.6
PNLT	81.7	86.7	90.5	90.7	92.4	92.9	91.3	89.0	82.6

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE F-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 32, 115 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-5.0	-3.5	-2.0	-.5	0	1.0	2.5	4.0	5.5
17	64.8	64.7	64.9	68.2	69.6	68.6	67.4	66.5	61.8
18	70.0	68.8	67.1	68.2	68.6	67.3	66.9	65.7	64.8
19	66.8	63.9	64.2	65.2	64.4	60.9	62.8	62.0	64.2
20	64.5	64.2	67.1	63.5	66.3	66.3	63.8	64.5	65.9
21	71.2	74.5	73.7	69.2	68.7	68.7	65.7	63.3	60.8
22	58.7	57.4	59.6	67.6	69.4	70.9	66.5	60.5	54.7
23	52.7	55.2	63.9	71.1	72.6	76.7	74.6	68.6	59.0
24	55.9	66.2	71.6	74.4	74.2	73.2	72.3	68.3	64.2
25	59.5	64.8	67.4	68.4	66.9	67.2	66.3	66.3	66.1
26	63.0	68.6	65.9	72.3	73.5	74.9	72.1	65.6	65.5
27	62.4	60.2	70.5	75.6	74.6	71.3	71.5	69.4	60.4
28	58.4	67.6	70.2	72.9	73.8	74.5	72.2	67.2	63.5
29	61.2	67.5	69.9	74.2	74.3	74.4	70.4	68.0	59.1
30	59.2	67.4	69.9	73.9	73.8	72.4	70.3	65.7	61.1
31	59.4	66.0	69.1	72.3	71.9	71.1	68.8	65.1	59.1
32	58.2	66.3	68.7	71.9	71.6	70.0	67.0	64.2	57.9
33	55.3	63.5	65.0	68.9	68.7	67.6	63.5	59.8	53.3
34	51.0	59.7	62.5	66.2	66.1	64.7	60.3	56.0	49.1
35	47.9	56.2	58.0	62.5	62.6	61.2	56.8	51.5	46.3
36	45.0	47.2	52.9	58.3	58.3	56.8	52.1	46.6	45.0
37	45.0	45.0	46.8	51.8	51.8	51.1	47.0	45.0	45.0
38	45.0	45.0	45.0	45.0	45.2	45.7	45.0	45.0	45.0
39	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
40	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
A	68.9	75.4	77.8	81.5	81.6	80.9	78.1	74.3	69.3
D	74.2	79.2	82.2	85.5	85.6	85.1	82.3	78.4	74.2
CASPL	78.5	80.7	82.6	85.0	84.7	84.6	82.7	79.0	75.7
PNL	80.5	86.4	88.9	92.2	92.2	91.4	88.7	85.2	81.0
PNLT	80.5	87.6	88.9	92.2	92.2	91.4	88.7	85.2	82.2

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE F-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 33, 115 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-8.5	-6.5	-4.5	-2.5	-.5	0	1.5	3.5	5.5	6.0
17	64.1	67.7	66.2	66.3	67.0	67.6	66.8	64.6	61.1	61.3
18	71.7	74.3	71.7	68.6	68.3	67.4	67.6	70.6	68.4	66.0
19	65.1	68.3	67.3	65.2	63.1	63.3	63.0	62.5	63.2	61.9
20	61.5	65.4	64.3	61.9	60.2	61.3	62.1	65.4	67.3	66.7
21	68.1	74.2	74.7	68.3	68.0	68.8	72.0	75.9	74.6	73.7
22	59.6	61.2	60.2	58.6	66.0	68.4	67.6	65.1	65.1	64.5
23	58.6	59.5	57.4	63.5	71.8	72.6	75.1	70.9	61.3	59.7
24	56.0	56.4	63.1	70.3	75.6	75.1	71.4	70.0	64.0	61.2
25	51.6	58.5	59.8	66.3	67.2	66.3	63.2	66.1	67.3	65.4
26	55.0	65.4	66.3	62.4	70.8	73.4	72.4	66.9	66.5	65.5
27	56.9	66.9	61.7	67.2	74.7	74.6	69.3	70.5	61.8	59.7
28	57.8	65.2	61.1	69.6	72.9	74.2	71.8	66.8	64.7	61.4
29	53.3	64.1	61.5	65.9	73.6	74.4	71.4	67.1	62.2	60.3
30	56.5	66.0	62.0	65.5	74.1	74.5	69.3	65.0	62.2	59.1
31	54.8	63.4	63.8	65.6	72.8	73.3	68.0	63.2	61.6	58.3
32	55.4	63.1	62.8	64.9	71.0	70.9	66.9	60.8	58.3	55.1
33	51.3	60.0	59.9	61.6	67.4	67.8	63.5	57.6	54.3	51.3
34	46.3	56.0	55.4	59.3	64.2	64.1	60.1	53.8	50.2	47.8
35	45.0	49.4	51.8	54.7	61.4	60.9	57.0	51.1	46.8	45.2
36	45.0	45.0	45.3	49.8	57.1	56.1	52.2	46.9	45.0	45.0
37	45.0	45.0	45.0	45.0	50.4	49.9	47.4	45.0	45.0	45.0
38	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
39	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
40	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
A	63.8	73.3	71.6	75.1	81.4	81.7	78.2	74.4	71.6	69.1
D	71.6	77.8	77.2	79.1	85.1	85.4	82.2	79.0	76.7	75.0
OASPL	78.7	82.7	81.4	80.9	84.9	85.1	83.7	81.3	78.6	77.4
PNL	77.8	84.3	83.7	85.9	91.5	91.7	88.6	85.9	83.1	81.5
PNLT	77.8	84.3	83.7	87.0	91.5	91.7	88.6	85.9	83.1	81.5

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE F-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 34, 115 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-8.5	-7.0	-5.5	-4.0	-2.5	-1.0	0	.5	2.0	4.0
17	65.8	63.4	62.1	63.7	65.6	66.9	67.9	67.7	62.2	61.6
18	70.1	70.3	66.3	65.7	66.7	63.7	63.5	63.1	60.7	60.7
19	66.0	67.0	64.3	66.1	65.7	62.7	63.0	63.4	63.1	63.7
20	61.6	64.6	65.3	65.7	64.4	63.1	63.8	65.3	67.1	69.1
21	67.4	74.7	74.0	75.0	70.9	63.7	63.5	62.6	55.7	62.5
22	58.6	61.0	59.2	56.7	64.9	68.5	69.6	68.6	60.2	58.1
23	51.2	56.4	52.6	64.5	70.5	75.7	77.2	76.7	69.4	55.7
24	49.3	54.1	63.0	71.8	75.2	76.0	76.7	76.7	71.4	61.9
25	52.9	60.6	62.9	71.2	71.0	68.3	68.3	70.6	69.6	66.4
26	56.4	66.9	68.5	70.6	68.2	74.7	77.0	76.4	65.4	66.7
27	60.5	67.1	62.6	68.7	75.2	73.7	75.6	76.5	70.0	62.7
28	60.7	65.9	64.4	73.0	72.3	73.9	76.8	76.7	69.4	63.3
29	55.8	66.8	69.3	70.7	74.0	73.1	75.4	75.7	69.5	64.3
30	60.1	66.9	64.5	71.3	73.0	72.8	75.0	75.3	66.9	60.9
31	55.8	64.5	65.9	71.0	71.3	71.8	74.0	74.0	66.3	59.8
32	57.6	61.9	64.4	70.2	69.6	69.7	72.7	72.5	64.5	58.0
33	54.8	59.7	61.8	68.3	67.4	67.1	69.3	68.9	60.3	53.6
34	50.5	56.2	58.0	66.3	65.0	64.8	65.8	65.3	56.7	50.3
35	46.7	51.9	53.4	62.8	62.1	60.9	61.2	60.5	52.3	46.4
36	45.0	45.0	46.5	56.8	57.5	56.0	56.2	55.4	48.1	45.0
37	45.0	45.0	45.0	49.5	50.7	50.5	51.1	50.2	45.0	45.0
38	45.0	45.0	45.0	45.0	45.0	45.2	45.6	45.5	45.0	45.0
39	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
40	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
A	66.4	73.6	74.4	79.9	80.7	81.0	83.0	83.1	76.3	70.7
D	73.0	77.8	78.5	84.8	84.6	85.2	86.7	86.6	79.6	75.2
QASPL	79.7	80.4	80.1	83.9	84.7	84.9	86.5	86.2	79.8	76.5
PNL	79.1	84.0	85.1	90.7	91.0	91.2	93.2	93.1	86.0	81.8
PNLT	80.5	84.0	86.6	91.8	91.0	91.2	93.2	93.1	86.0	81.8

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE F-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 16, 9 DEGREE APPROACH, CENTERLINE MIC. ( HARD SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-16.5	-13.5	-10.5	-7.5	-4.5	-1.5	0	.5	1.5	4.5	6.0
17	63.5	65.4	66.6	65.6	67.4	68.0	71.4	71.6	70.4	68.9	66.2
18	65.2	69.0	69.1	69.7	69.5	70.8	68.9	68.3	64.0	66.1	65.0
19	61.1	62.4	63.1	62.8	65.9	62.8	63.4	64.5	65.4	65.4	63.6
20	59.7	60.1	61.3	60.5	59.7	65.3	74.1	76.7	78.4	63.2	66.6
21	69.1	70.3	70.2	69.9	59.0	77.5	80.4	80.9	80.2	63.8	60.6
22	54.1	56.0	53.8	53.0	59.4	71.1	74.1	75.2	78.4	70.4	55.6
23	51.8	51.2	54.5	60.8	64.8	70.4	72.3	71.9	72.4	73.0	62.1
24	63.4	62.7	65.9	74.7	76.3	73.9	71.3	74.3	76.1	71.6	65.6
25	64.2	61.8	63.3	67.4	62.8	68.4	75.2	75.3	74.6	66.0	66.2
26	70.2	66.7	70.0	68.7	62.9	74.6	73.4	74.0	74.5	67.1	63.5
27	67.6	61.2	60.4	61.7	66.2	69.6	73.5	72.9	73.6	67.3	61.3
28	58.2	54.1	56.8	66.6	58.1	67.8	72.9	73.2	74.1	66.3	62.9
29	60.2	59.6	58.9	60.6	61.5	68.7	72.0	72.1	72.5	66.7	62.0
30	56.5	57.3	54.8	63.3	61.0	68.7	70.4	70.3	70.4	64.3	61.0
31	57.1	58.8	54.9	62.4	59.9	67.2	69.3	68.9	69.0	63.7	60.0
32	55.9	56.6	54.6	62.3	60.4	66.6	68.4	68.4	68.0	62.9	59.7
33	49.8	54.4	52.6	60.7	60.2	64.2	67.4	67.4	65.8	59.8	57.1
34	45.4	50.6	49.1	58.1	58.5	63.9	66.6	65.8	63.5	58.8	55.4
35	45.0	45.3	45.1	54.2	55.9	63.7	63.9	63.6	62.3	56.9	53.1
36	45.0	45.0	45.0	49.7	53.9	60.3	61.3	61.5	60.0	53.5	49.3
37	45.0	45.0	45.0	45.0	47.0	55.2	57.6	57.9	57.4	49.8	45.2
38	45.0	45.0	45.0	45.0	45.0	50.0	53.7	54.5	54.6	46.0	45.0
39	45.0	45.0	45.0	45.0	45.0	45.3	48.9	49.7	50.3	45.0	45.0
40	45.0	45.0	45.0	45.0	45.0	45.0	46.0	46.4	46.2	45.0	45.0
A	69.6	68.1	68.3	73.2	72.4	77.7	80.0	79.9	80.4	74.4	70.5
D	74.4	73.9	74.5	78.6	78.8	83.5	85.5	85.4	85.3	79.6	75.4
OASPL	79.7	82.7	84.1	85.9	88.5	93.0	89.2	88.3	88.3	83.5	79.8
PNL	82.2	80.9	82.1	85.9	86.2	90.4	92.6	92.7	92.4	86.3	82.1
PNLT	82.2	82.2	83.1	87.8	86.2	90.4	92.6	92.7	92.4	86.3	82.1

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0



TABLE F-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 18, 60 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-17.0	-13.5	-10.0	-6.5	-3.0	-1.0	0	.5	4.0	7.5	8.0
17	62.1	61.4	65.3	64.9	70.2	69.7	68.6	68.7	68.0	72.2	71.3
18	63.0	61.0	62.1	71.0	76.8	70.3	64.4	62.7	59.8	64.3	64.2
19	62.4	63.8	64.6	69.5	71.1	63.9	59.9	62.4	56.1	61.9	62.2
20	63.5	61.9	63.0	65.6	63.0	68.2	74.9	77.7	65.0	60.7	61.6
21	66.6	69.2	69.6	71.1	67.0	75.3	76.5	76.7	67.8	56.4	59.6
22	60.4	61.7	59.1	58.7	69.4	71.1	70.4	70.2	69.7	60.3	59.7
23	61.7	62.3	56.9	61.3	72.0	71.3	68.4	67.6	69.6	62.9	61.7
24	64.6	63.1	57.8	70.3	76.0	72.8	67.5	67.8	64.3	63.3	63.3
25	64.7	68.7	61.5	69.5	65.1	71.3	71.4	71.0	71.3	63.6	64.4
26	65.1	77.3	66.9	73.0	69.9	71.0	69.4	69.6	68.4	61.2	60.1
27	64.9	76.2	66.1	64.9	71.4	71.3	72.7	72.1	70.9	65.8	63.6
28	60.1	70.4	57.8	68.0	69.6	71.9	73.0	72.9	69.8	62.1	60.9
29	55.6	61.6	61.3	66.1	71.5	72.0	72.8	72.7	69.0	63.8	61.5
30	53.8	66.4	61.0	65.6	70.8	73.1	72.4	71.8	67.3	61.3	59.0
31	51.9	60.7	59.8	64.5	69.3	71.2	71.3	70.3	66.8	63.1	60.3
32	48.9	58.7	57.3	64.8	68.8	69.7	69.8	69.2	65.2	62.4	59.1
33	45.1	55.8	54.8	61.8	66.6	67.1	67.3	66.8	61.4	57.6	54.5
34	45.0	49.6	51.5	58.3	65.1	65.6	65.4	64.4	59.1	53.4	50.9
35	45.0	45.0	46.0	54.7	63.9	62.7	61.9	61.0	56.9	50.5	47.6
36	45.0	45.0	45.0	49.4	59.5	57.8	57.6	57.2	53.1	46.5	45.3
37	45.0	45.0	45.0	45.0	51.6	52.6	53.0	53.0	49.0	45.0	45.0
38	45.0	45.0	45.0	45.0	45.2	47.0	46.3	48.7	45.5	45.0	45.0
39	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
40	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
A	67.1	77.1	69.7	74.9	78.9	80.0	80.2	79.9	76.5	71.1	69.1
D	72.6	81.0	74.6	79.7	83.7	84.8	84.4	84.0	80.4	75.6	73.6
OASPL	79.0	82.1	80.8	84.0	86.2	87.7	88.7	89.2	87.5	81.3	80.7
PNL	79.8	87.8	81.6	87.1	90.7	91.3	91.2	90.9	87.1	82.9	80.9
PNLT	79.8	89.5	81.6	87.1	90.7	91.3	91.2	90.9	87.1	82.9	80.9

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE F-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 19, 60 KT. FLY BY, CENTERLINE MIC. ( HARD SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-16.0	-13.0	-10.0	-7.0	-4.0	-1.0	0	2.0	5.0
17	59.3	61.2	62.8	67.5	70.1	72.8	73.6	71.6	73.1
18	72.6	72.9	74.0	75.6	76.7	73.4	72.4	68.0	69.0
19	62.3	68.4	70.4	72.5	71.7	65.4	66.0	64.6	60.5
20	64.7	65.8	67.5	68.6	66.7	72.8	78.1	76.1	61.7
21	73.8	73.8	72.8	73.3	69.4	78.4	79.7	73.6	68.4
22	65.1	64.0	60.3	59.4	66.6	77.5	78.0	71.8	68.6
23	67.3	63.1	57.3	63.8	71.4	74.3	74.1	67.3	69.3
24	58.2	58.1	54.7	72.7	75.6	72.8	74.8	70.7	63.0
25	55.3	56.8	59.9	69.9	67.9	76.8	77.3	70.7	63.2
26	63.4	60.7	63.6	69.2	69.1	74.7	75.1	71.6	69.2
27	66.9	60.4	61.6	65.1	72.4	76.2	74.9	71.4	66.9
28	59.3	58.5	55.4	67.4	67.6	73.5	74.0	71.9	67.9
29	55.3	56.0	58.8	64.4	69.4	72.9	72.4	71.8	68.5
30	55.5	59.2	58.7	64.9	68.3	72.6	71.2	69.5	67.1
31	53.9	57.4	60.2	64.6	66.5	71.4	70.7	68.6	66.9
32	53.7	56.2	58.0	64.3	66.6	70.3	69.2	67.0	65.1
33	49.9	51.6	53.0	60.6	63.5	68.4	67.4	63.7	61.3
34	47.3	48.3	50.8	57.7	62.4	66.4	65.0	61.7	59.4
35	45.0	45.0	46.6	54.3	60.3	63.1	62.0	59.4	57.0
36	45.0	45.0	45.0	49.7	56.4	59.0	58.5	56.0	53.0
37	45.0	45.0	45.0	45.1	47.8	53.9	54.3	52.4	48.5
38	45.0	45.0	45.0	45.0	45.0	48.8	49.5	48.4	45.2
39	45.0	45.0	45.0	45.0	45.0	45.0	45.4	45.1	45.0
40	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
A	68.2	67.2	68.3	74.3	77.2	81.2	81.0	78.5	75.5
D	74.3	73.2	74.2	79.3	82.2	85.7	85.9	83.0	79.6
OASPL	79.0	79.1	80.0	82.9	85.5	89.1	90.5	90.5	86.3
PNL	81.3	81.2	81.2	86.6	89.3	93.0	93.0	89.7	86.7
PNLT	81.3	81.2	81.2	86.6	89.3	93.0	93.0	89.7	86.7

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE F-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 20, 6 DEGREE APPROACH, CENTERLINE MIC. ( HARD SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-9.0	-7.0	-5.0	-3.0	-1.0	0	1.0	3.0	5.0	8.0
17	66.2	66.1	67.8	69.0	68.7	69.7	70.9	72.4	72.1	67.6
18	72.6	73.6	72.0	72.1	70.3	68.9	68.8	70.6	72.7	69.9
19	65.7	66.5	65.1	67.6	66.7	66.2	68.0	62.7	67.6	65.0
20	66.7	66.3	64.0	63.5	74.1	79.5	83.0	75.7	67.8	68.6
21	75.7	75.3	74.6	77.1	80.8	84.2	86.6	83.9	76.7	69.9
22	66.3	61.9	61.9	73.2	80.0	80.6	84.4	87.0	75.5	66.5
23	68.8	66.2	67.1	76.9	75.8	77.3	77.2	85.8	80.8	67.9
24	67.7	75.1	78.6	79.9	75.3	78.4	82.3	77.4	80.6	68.1
25	66.4	71.4	68.6	69.7	78.7	79.5	79.8	83.5	74.8	70.7
26	70.7	74.4	68.1	75.5	75.9	76.2	79.5	81.5	72.9	73.4
27	65.7	64.9	69.7	73.6	74.7	76.1	77.0	78.0	73.7	69.1
28	61.0	70.0	64.5	71.3	72.2	73.8	75.3	74.0	67.6	62.5
29	63.7	64.5	64.2	68.1	71.9	72.0	73.3	71.4	66.7	63.4
30	59.4	64.9	62.3	66.3	71.2	71.0	70.7	69.3	64.0	60.1
31	60.4	62.5	61.2	65.6	69.7	69.5	69.4	68.6	62.8	59.9
32	61.8	61.1	61.2	65.9	68.8	68.4	68.4	66.2	61.9	58.3
33	58.3	60.8	60.1	63.1	67.5	67.2	66.4	63.1	58.7	55.6
34	54.4	59.0	58.7	62.9	67.6	65.7	63.6	61.8	57.2	53.2
35	50.1	55.5	55.6	63.5	65.4	63.2	62.4	59.6	55.0	50.8
36	46.5	50.7	53.5	59.5	61.3	60.5	59.8	57.3	51.5	46.9
37	45.0	45.5	47.7	52.3	56.8	57.1	56.6	53.6	46.9	45.0
38	45.0	45.0	45.0	46.6	52.5	53.5	54.1	50.0	45.0	45.0
39	45.0	45.0	45.0	45.0	47.1	49.1	49.8	46.1	45.0	45.0
40	45.0	45.0	45.0	45.0	45.0	45.5	46.0	45.1	45.0	45.0
A	72.3	76.0	75.1	79.2	81.4	81.9	83.5	84.1	78.7	73.9
D	78.0	80.9	81.0	84.9	87.2	87.6	89.1	89.7	84.4	78.6
OASPL	84.9	86.8	88.9	89.4	90.1	90.0	92.3	93.2	87.5	81.0
PNL	85.4	88.2	88.6	92.0	94.0	94.6	96.0	96.3	91.4	86.3
PNLT	86.5	89.9	88.6	92.0	94.0	94.6	96.0	96.3	91.4	86.3

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE F-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 26, 100 KT. FLY BY, CENTERLINE MIC. ( HARD SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-6.5	-4.5	-2.5	-.5	0	1.5	3.5	5.5	7.5
17	69.8	70.7	68.0	68.5	68.9	68.3	68.0	66.2	68.0
18	73.2	75.0	71.5	71.8	71.0	70.0	71.7	69.8	70.7
19	67.0	69.3	66.6	69.3	70.3	66.8	66.3	64.6	67.9
20	65.9	67.6	65.5	71.4	76.5	82.3	64.6	64.2	64.1
21	73.7	78.9	74.7	80.8	81.6	75.4	71.8	70.0	69.2
22	66.3	67.0	63.9	70.9	71.4	70.7	70.0	64.6	62.3
23	67.3	70.6	70.2	72.2	71.0	69.1	72.9	68.1	66.5
24	61.6	70.8	77.3	75.5	72.2	69.0	66.8	64.6	60.6
25	58.7	64.3	65.5	73.1	73.4	72.1	66.9	63.2	62.7
26	64.2	71.5	67.8	75.9	74.9	74.8	71.5	61.7	65.6
27	63.2	63.5	73.7	77.0	77.6	73.9	69.7	65.3	59.7
28	61.0	70.1	72.2	76.1	75.8	73.2	70.6	63.2	63.6
29	61.5	67.5	74.1	76.6	76.4	75.0	69.9	64.4	63.0
30	61.5	68.4	72.4	76.0	76.1	72.9	68.3	63.1	62.0
31	60.2	64.0	70.8	73.9	73.8	72.0	67.4	61.5	61.5
32	60.5	61.7	69.1	71.9	72.2	70.4	66.3	60.2	59.4
33	59.7	60.3	66.3	70.1	69.9	67.8	62.5	57.4	55.7
34	57.2	57.3	64.9	69.4	58.7	66.0	60.1	55.5	55.0
35	55.0	55.5	63.2	66.7	66.4	63.6	57.6	55.0	55.0
36	55.0	55.0	58.7	63.5	63.0	60.2	55.2	55.0	55.0
37	55.0	55.0	55.4	58.1	58.2	56.6	55.0	55.0	55.0
38	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	70.5	75.3	80.7	84.0	84.1	82.0	77.2	70.9	70.2
D	78.0	80.8	85.1	88.2	88.2	86.1	82.0	77.6	77.2
OASPL	84.5	85.6	86.0	88.2	88.3	87.2	84.4	81.2	81.2
PNL	85.0	88.7	91.5	95.2	94.9	93.0	89.0	84.5	84.0
PNLT	85.0	90.2	91.5	95.2	94.9	93.0	89.0	84.5	84.0

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE F-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 27, 100 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB + RE 20 MICRO PA)

BAND	-7.5	-6.0	-4.5	-3.0	-1.5	-1.0	0	1.5	3.0	4.5
17	70.1	71.0	68.8	69.3	71.9	71.9	69.6	69.0	68.0	66.2
18	73.6	73.7	72.4	72.9	69.9	70.6	69.1	63.1	62.6	64.8
19	68.9	69.4	68.5	66.5	66.6	66.1	63.2	62.8	57.2	61.3
20	70.7	72.4	74.7	75.3	72.0	71.6	71.9	79.2	66.6	62.8
21	70.5	74.2	73.6	70.2	69.9	76.0	78.2	74.6	65.8	59.1
22	59.5	61.5	58.4	57.5	65.9	67.3	68.5	69.9	67.4	63.5
23	57.5	57.0	55.0	62.6	69.3	69.7	67.5	63.7	66.3	68.1
24	55.8	58.4	65.8	74.0	78.3	78.2	73.5	66.7	63.2	62.7
25	53.6	62.2	63.5	65.4	64.9	68.1	71.4	68.7	70.9	60.5
26	61.9	66.7	67.4	68.7	72.0	75.5	74.7	74.9	72.1	69.0
27	64.3	66.5	61.5	67.9	72.1	74.4	76.6	73.9	72.7	64.9
28	64.9	65.4	61.9	70.6	75.7	77.3	75.6	74.0	71.1	66.7
29	58.6	60.6	63.5	66.5	72.0	74.0	74.8	74.9	71.2	65.8
30	61.5	64.0	62.3	67.3	72.1	74.1	74.7	73.6	69.6	65.7
31	60.2	62.1	62.6	65.4	70.1	72.2	73.0	71.8	68.2	64.2
32	59.7	63.1	63.9	66.4	69.7	71.3	72.3	70.3	66.4	61.9
33	56.6	60.6	63.0	64.1	68.0	69.3	70.2	68.0	63.2	58.7
34	53.4	57.4	59.6	62.9	67.6	68.7	68.5	65.6	60.4	56.1
35	47.6	52.0	57.2	59.0	64.2	66.3	66.5	63.3	58.5	53.1
36	45.0	45.7	51.2	53.7	61.0	62.9	62.5	59.6	55.3	49.3
37	45.0	45.0	45.0	47.2	54.8	55.8	57.0	55.7	50.7	45.5
38	45.0	45.0	45.0	45.0	47.9	49.8	51.2	51.0	46.5	45.0
39	45.0	45.0	45.0	45.0	45.0	45.0	45.8	45.8	45.0	45.0
40	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
A	69.9	72.2	72.8	76.2	80.6	82.4	82.5	81.2	78.1	73.5
D	75.7	78.0	76.9	81.6	85.3	86.9	86.7	85.1	81.8	77.2
OASPL	83.8	84.3	84.6	85.2	86.8	87.6	86.8	85.9	83.3	80.9
FNL	81.9	84.7	85.8	88.2	92.3	93.9	93.9	92.1	88.3	84.3
PNLT	83.0	84.7	85.8	89.3	93.5	94.9	93.9	92.1	88.3	84.3

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE F-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 28, 100 KT. FLY BY, CENTERLINE MIC. ( HARD SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-7.0	-5.5	-4.0	-2.5	-1.0	0	.5	2.0	3.5	4.5
17	68.3	71.7	69.6	69.8	69.4	68.9	69.1	69.7	70.2	67.5
18	73.6	72.9	74.1	72.9	68.5	67.8	68.3	67.9	68.1	67.1
19	68.0	67.5	66.5	64.8	58.9	61.2	64.6	62.3	61.1	61.3
20	61.8	62.4	62.9	61.7	68.4	78.7	80.3	73.1	60.3	60.3
21	69.9	71.7	70.2	68.2	79.0	79.9	78.5	67.9	62.4	59.6
22	57.7	57.6	57.4	65.5	62.5	69.9	70.0	67.6	65.3	62.3
23	55.2	55.6	62.3	56.5	68.6	65.4	64.6	65.6	68.6	66.5
24	54.5	67.0	75.2	76.3	71.9	67.5	69.0	63.8	62.6	64.0
25	59.0	62.5	64.8	62.3	59.8	69.9	69.5	71.4	64.1	60.3
26	66.0	70.3	70.5	68.3	72.9	72.2	72.6	70.5	69.7	65.1
27	64.8	52.7	66.3	68.9	73.5	73.2	72.7	70.7	66.5	63.8
28	62.9	66.0	69.0	69.6	71.8	72.8	73.2	70.9	66.9	64.2
29	60.5	63.7	64.7	67.4	72.1	73.0	73.4	71.0	65.6	62.5
30	60.2	61.9	63.5	67.2	72.6	73.2	72.5	69.3	64.5	61.5
31	61.0	61.4	63.1	66.1	70.9	71.5	71.1	67.9	63.9	60.5
32	61.0	61.5	62.7	65.8	70.6	70.1	69.8	66.0	62.4	59.1
33	59.1	57.5	61.3	63.7	68.3	67.9	67.4	63.3	58.2	55.0
34	54.4	54.8	59.5	61.7	67.3	66.1	65.2	60.3	56.2	52.5
35	50.1	50.9	55.8	59.7	65.9	63.0	62.3	58.1	53.1	49.5
36	45.0	45.1	50.8	56.3	61.9	59.3	58.9	54.3	48.9	46.1
37	45.0	45.0	45.5	50.9	55.8	54.9	54.6	50.5	45.5	45.0
38	45.0	45.0	45.0	45.0	49.7	50.0	49.9	46.3	45.0	45.0
39	45.0	45.0	45.0	45.0	45.2	45.2	45.1	45.0	45.0	45.0
40	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
A	71.0	72.6	74.8	76.5	80.6	80.5	80.5	77.5	73.8	70.8
D	75.9	77.2	79.7	81.5	85.7	85.3	84.8	81.6	77.7	74.9
OASPL	83.8	84.2	85.0	85.9	86.6	86.3	86.3	85.3	82.0	79.8
PNL	82.4	84.5	87.1	88.7	92.4	91.9	91.8	88.2	84.8	81.7
PNLT	82.4	84.5	88.2	88.7	92.4	91.9	91.8	88.2	84.8	81.7

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE F-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 31, 3 DEGREE APPROACH, CENTERLINE MIC. ( HARD SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-7.5	-6.0	-4.5	-3.0	-1.5	0	1.5	3.0	5.5
17	66.8	66.1	68.8	67.2	70.4	73.0	72.4	71.4	71.3
18	70.4	70.7	73.3	70.8	74.4	71.8	67.8	69.1	71.8
19	65.1	66.7	68.1	67.3	69.9	65.0	69.6	66.8	68.5
20	61.9	62.3	65.8	64.4	64.7	79.5	83.8	69.7	69.2
21	66.2	67.6	69.5	67.0	76.0	81.9	80.6	71.5	63.8
22	58.1	57.8	62.1	71.4	78.5	77.7	77.2	73.7	62.9
23	55.6	60.9	71.6	79.2	79.4	75.9	73.2	75.2	66.5
24	63.0	70.9	79.4	83.4	80.6	75.0	76.4	68.1	70.8
25	68.9	76.9	81.7	83.3	77.7	78.8	76.9	71.3	70.4
26	74.4	78.3	79.4	79.9	82.7	77.5	77.4	70.8	64.1
27	69.6	69.6	77.6	82.1	78.3	78.0	76.6	70.9	65.2
28	60.5	69.7	77.9	77.0	78.4	75.3	76.7	71.1	65.2
29	62.5	66.4	69.3	75.6	74.5	75.3	75.9	70.5	63.7
30	58.7	65.3	70.0	71.8	74.7	74.7	74.5	70.1	63.0
31	59.2	64.7	68.1	71.7	74.8	74.3	72.6	68.5	63.0
32	59.7	63.5	66.9	71.5	73.3	73.1	72.0	67.6	61.8
33	57.0	60.8	64.7	69.3	71.9	70.8	69.4	64.8	58.6
34	55.5	59.4	63.6	67.7	70.4	68.9	66.9	62.5	56.6
35	55.0	57.3	60.6	67.0	69.6	66.7	65.3	61.1	55.1
36	55.0	55.1	57.0	64.7	66.0	63.6	62.9	58.9	55.0
37	55.0	55.0	55.0	59.5	61.0	60.6	59.9	56.1	55.0
38	55.0	55.0	55.0	55.0	56.4	57.5	57.9	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.3	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	73.5	77.8	82.9	85.0	85.9	84.1	83.9	78.4	72.7
D	78.8	82.9	87.4	90.0	90.8	88.9	88.5	83.5	79.4
OASPL	83.9	85.4	89.1	91.0	91.2	91.9	92.9	89.3	83.7
PNL	87.0	90.5	94.0	96.7	97.7	96.0	95.4	90.5	86.1
PNLT	87.0	90.5	95.4	96.7	97.7	96.0	95.4	90.5	86.1

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE F-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 32, 115 KT. FLY BY, CENTERLINE MIC. ( HARD SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)

(DB RE 20 MICRO PA)

BAND	-4.0	-3.0	-2.0	-1.0	0	1.0	2.0	3.0	4.0
17	67.6	69.1	69.1	69.5	70.4	69.3	69.2	69.3	65.6
18	72.6	72.1	71.1	72.6	70.6	68.0	68.8	69.1	67.1
19	66.3	64.1	65.1	67.1	62.8	63.7	63.3	62.8	63.3
20	63.3	64.0	66.3	67.3	73.7	79.3	74.6	66.3	61.7
21	70.9	71.2	70.9	76.5	77.4	75.3	70.6	67.3	62.2
22	57.5	57.7	64.7	69.5	72.4	71.7	70.4	70.2	67.4
23	54.9	63.3	69.0	70.7	69.7	66.2	67.4	71.2	69.4
24	66.1	73.4	79.0	79.2	73.4	69.9	67.6	66.4	66.8
25	63.6	66.1	66.3	70.9	74.6	72.4	73.3	70.8	63.5
26	67.8	69.5	69.1	77.3	76.3	74.4	73.6	73.0	69.9
27	60.4	67.6	74.2	74.7	77.2	75.9	74.9	73.5	68.3
28	65.9	70.7	75.1	78.2	78.0	75.7	73.5	72.3	68.9
29	65.2	69.1	76.7	76.6	77.1	75.6	72.5	71.4	67.5
30	59.7	65.8	75.2	76.1	76.6	75.1	71.4	70.5	66.8
31	59.8	64.8	72.8	74.9	76.1	74.4	71.1	70.3	65.8
32	59.0	63.8	70.7	73.8	74.9	73.2	69.8	68.2	63.5
33	58.2	62.9	68.2	70.8	73.2	71.5	67.4	64.7	59.5
34	56.4	60.5	65.9	68.5	70.9	69.1	64.7	61.8	56.9
35	54.1	57.4	62.4	66.6	68.4	66.3	61.8	59.2	53.4
36	47.8	51.3	58.0	63.1	64.9	62.7	58.1	54.8	49.4
37	45.0	45.9	52.6	57.5	60.3	58.0	53.0	49.9	45.5
38	45.0	45.0	46.3	50.4	55.1	53.0	48.4	45.5	45.0
39	45.0	45.0	45.0	45.1	48.7	47.7	45.0	45.0	45.0
40	45.0	45.0	45.0	45.1	45.3	45.0	45.0	45.4	45.3
A	71.8	76.0	82.1	84.2	84.7	83.3	80.1	79.2	74.9
D	76.7	80.1	85.6	88.4	89.0	87.1	84.2	82.8	78.8
OASPL	82.0	82.9	86.5	87.9	88.4	87.6	84.9	83.6	80.6
PNL	83.5	87.0	92.2	95.0	96.2	94.5	91.4	89.7	85.7
PNLT	84.5	87.0	92.2	95.0	96.2	94.5	91.4	89.7	85.7

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0



# TABLE F-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 33. 115 KT. FLY BY, CENTERLINE MIC. ( HARD SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-8.0	-6.0	-4.0	-2.0	0	2.0	4.0	6.0	6.5
17	68.3	69.5	70.8	70.5	66.2	66.8	66.9	67.3	67.8
18	74.9	74.0	73.7	73.3	72.0	70.6	72.1	70.1	68.9
19	69.9	69.5	67.7	64.6	63.8	64.4	64.2	63.8	63.4
20	64.8	63.8	62.3	62.0	73.6	77.6	63.7	62.4	62.3
21	70.4	74.1	72.1	75.5	80.9	73.6	74.3	71.5	70.4
22	60.0	61.9	59.6	66.1	69.7	68.6	67.5	62.3	60.8
23	57.2	55.7	60.2	69.3	66.4	65.6	70.4	63.8	61.9
24	54.4	62.5	71.0	76.8	69.8	66.8	63.8	64.3	61.9
25	56.0	64.7	64.5	65.6	70.7	72.1	63.2	64.8	63.5
26	60.4	70.4	67.7	69.2	73.1	73.0	70.0	61.7	62.6
27	60.9	66.8	61.0	72.4	73.6	73.3	67.8	66.1	62.6
28	59.8	63.4	68.0	73.7	72.2	71.5	68.9	66.9	66.3
29	57.1	65.2	63.3	71.2	72.6	71.3	68.2	66.8	64.4
30	60.7	61.3	63.8	70.7	72.7	70.3	66.3	64.6	62.0
31	60.1	63.2	64.2	68.5	71.8	68.4	65.5	62.9	60.4
32	60.1	61.5	63.3	67.4	69.9	67.5	63.7	62.0	59.0
33	56.8	60.3	61.9	65.6	68.1	64.8	59.3	57.3	54.1
34	52.4	54.9	59.4	63.5	66.6	62.6	57.0	53.6	50.5
35	46.5	50.8	56.1	60.0	64.8	60.1	54.1	49.7	48.0
36	45.0	46.1	50.0	55.8	60.4	56.0	50.5	46.0	45.3
37	45.0	45.0	45.2	50.3	55.5	51.5	45.4	45.0	45.0
38	45.0	45.0	45.0	45.0	49.5	47.1	45.0	45.0	45.0
39	45.0	45.0	45.0	45.0	45.2	45.0	45.0	45.0	45.0
40	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
A	69.1	72.7	73.8	78.9	80.5	78.7	75.2	72.8	70.8
D	74.5	77.5	79.3	83.5	85.4	83.0	79.0	76.6	74.8
OASPL	82.0	84.3	84.7	86.0	86.1	85.2	82.2	80.6	80.4
PNL	81.4	85.0	85.6	90.2	92.3	89.9	86.2	83.8	82.1
PNLT	81.4	85.0	87.5	90.2	92.3	89.9	86.2	83.8	82.1

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE F-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 34, 115 KT. FLY BY, CENTERLINE MIC. ( HARD SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-6.5	-5.0	-3.5	-2.0	-.5	0	1.0	2.5	4.0	5.0
17	69.2	67.1	67.8	66.0	69.3	70.1	70.6	69.8	65.7	64.7
18	68.0	69.0	70.2	67.6	69.0	68.4	68.1	63.7	64.9	63.1
19	64.3	64.2	65.1	65.5	65.3	65.0	66.8	64.1	60.5	62.2
20	62.2	62.0	61.6	61.3	65.3	69.5	80.8	77.7	60.0	59.2
21	67.5	71.0	71.1	68.1	75.8	78.7	79.4	70.2	63.0	57.5
22	58.8	58.2	57.8	60.5	68.9	69.8	70.7	70.5	66.5	64.0
23	56.4	54.6	56.2	65.8	69.7	69.3	65.8	67.7	70.5	68.9
24	54.8	55.8	68.1	76.3	79.0	77.5	70.0	67.0	64.1	66.7
25	52.0	58.0	64.1	65.7	70.4	73.3	74.1	72.1	66.7	63.2
26	55.5	63.9	69.8	68.2	76.1	76.6	74.1	73.6	70.6	68.3
27	56.4	64.2	63.1	74.2	74.7	75.4	75.8	73.7	67.9	66.8
28	57.4	64.9	70.6	73.3	77.0	76.5	74.5	72.0	67.3	66.2
29	52.2	61.3	70.6	74.0	76.4	76.2	74.8	71.1	66.8	64.8
30	51.1	64.2	68.5	71.0	75.5	75.7	74.1	70.5	65.8	64.2
31	51.8	62.0	65.2	68.5	73.6	73.9	72.4	69.1	65.5	64.4
32	62.9	69.0	67.9	67.9	71.8	72.1	70.9	67.9	63.3	62.0
33	50.9	60.9	63.1	66.6	70.1	70.6	70.3	64.9	59.7	57.6
34	45.7	56.5	59.0	64.3	69.1	69.5	68.2	62.7	57.3	54.6
35	46.3	53.0	56.6	60.4	66.8	67.7	66.1	60.5	54.5	50.8
36	45.0	45.5	49.5	54.9	64.1	64.9	62.5	57.2	50.6	46.9
37	45.0	45.0	45.0	49.0	57.2	58.4	57.5	52.7	46.1	45.0
38	45.0	45.0	45.0	45.2	50.1	51.8	52.4	48.8	45.0	45.0
39	45.0	45.0	45.0	45.0	45.2	45.5	46.6	45.0	45.0	45.0
40	45.0	45.1	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
A	56.1	73.4	76.8	79.9	83.3	83.5	82.3	79.0	74.7	73.0
D	72.6	78.3	80.7	83.8	87.6	87.8	86.8	83.0	78.9	77.4
OASPL	82.3	81.3	82.3	83.5	87.8	87.7	87.3	84.7	81.8	79.7
PNL	80.3	85.9	87.4	89.8	94.3	94.9	94.0	90.2	85.8	83.9
PNLT	84.1	88.4	88.6	89.8	94.3	94.9	94.0	90.2	85.8	83.9

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE F-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 32, 115 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-5.0	-4.0	-3.0	-2.0	-1.0	0	1.0	2.0	5.0
17	65.4	65.8	65.0	64.8	65.1	67.4	67.1	66.1	62.9
18	70.4	70.6	70.4	69.9	66.3	63.2	64.2	66.0	64.5
19	63.4	63.7	61.9	60.5	59.8	60.2	52.1	61.9	60.3
20	59.0	59.6	58.0	60.3	64.7	74.2	82.1	79.1	57.4
21	63.5	63.3	63.2	69.0	77.7	80.7	77.4	70.2	57.7
22	49.3	52.5	57.2	62.8	68.5	70.8	70.9	69.4	63.5
23	53.9	57.6	63.5	66.4	68.8	67.6	63.9	55.4	66.9
24	60.8	65.0	72.6	76.3	76.4	72.6	70.1	69.8	65.3
25	60.0	61.4	62.8	63.0	69.2	72.6	71.1	73.6	60.3
26	60.7	62.1	61.6	64.8	75.2	74.4	71.1	71.1	64.2
27	56.6	58.7	65.8	68.5	70.9	74.8	73.0	73.0	65.9
28	62.3	67.0	66.6	70.8	73.6	73.6	72.6	71.9	65.1
29	62.0	63.5	64.9	68.8	72.1	73.2	73.9	71.9	64.3
30	57.9	61.8	63.4	68.2	71.8	72.6	72.7	70.7	62.8
31	58.3	60.2	63.0	67.2	70.2	70.4	71.2	69.2	61.6
32	56.9	60.7	62.5	66.6	69.1	69.4	69.8	67.8	60.0
33	55.4	60.5	61.4	64.9	66.9	67.4	67.5	65.4	56.4
34	53.1	57.4	59.9	63.8	65.9	65.9	65.1	62.1	52.9
35	49.3	53.4	57.7	62.0	64.1	64.1	62.7	59.6	49.0
36	45.0	46.5	51.7	57.1	60.8	60.9	59.6	56.2	45.2
37	45.0	45.0	46.8	51.4	55.2	55.7	54.8	52.1	45.0
38	45.0	45.0	45.0	45.1	47.9	49.6	49.8	47.7	45.0
39	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
40	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
A	68.4	71.6	73.6	77.2	80.3	80.9	80.5	79.1	71.7
D	73.0	76.4	78.3	82.1	85.1	85.4	85.1	83.2	75.4
CASPL	78.9	80.0	80.7	81.9	84.9	86.2	86.4	84.5	77.7
PNL	79.7	83.0	85.2	88.8	91.6	92.2	91.8	90.0	82.1
PNLT	80.7	84.9	85.2	88.8	91.6	92.2	91.8	90.0	82.1

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE F-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 33, 115 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-6.0	-4.5	-3.0	-1.5	0	1.5	3.0	4.5	6.5
17	68.6	67.5	69.0	67.8	68.9	67.2	66.3	69.3	64.7
18	71.9	72.5	73.0	71.5	71.1	71.8	69.8	69.6	70.3
19	68.5	64.9	63.4	62.8	61.8	64.1	62.6	63.2	62.4
20	62.7	60.7	60.1	58.7	65.2	79.4	78.9	65.1	58.6
21	69.2	70.0	68.6	72.2	79.5	81.3	74.6	72.6	71.9
22	55.7	57.6	59.6	63.2	68.5	68.9	69.0	66.8	62.7
23	51.4	57.5	63.1	65.0	67.6	63.7	66.6	68.3	64.3
24	59.2	68.0	72.6	75.7	72.7	67.2	67.0	61.6	61.3
25	58.0	62.0	64.9	63.5	66.5	70.5	71.7	66.9	59.0
26	59.8	64.1	63.2	64.1	70.8	69.4	69.8	66.3	59.0
27	55.9	56.1	66.2	69.6	68.1	71.2	70.4	67.3	63.1
28	55.7	62.1	68.2	69.2	69.6	70.8	69.9	64.9	60.7
29	58.6	60.0	63.5	68.5	68.6	71.3	68.8	65.2	59.2
30	53.8	57.3	62.4	67.5	68.4	70.1	68.1	63.7	58.7
31	55.3	57.7	62.5	64.5	66.6	68.9	66.9	63.1	57.1
32	54.8	58.1	62.0	62.1	66.0	67.8	65.0	61.3	54.5
33	51.2	56.0	59.2	60.8	63.4	65.4	61.8	57.6	51.4
34	46.7	52.0	57.8	58.8	61.5	63.1	59.3	54.3	48.3
35	45.0	46.4	53.5	55.0	59.6	60.4	56.3	51.7	46.0
36	45.0	45.0	47.9	49.5	55.7	56.7	52.5	47.8	45.0
37	45.0	45.0	45.0	45.2	49.5	51.6	48.8	45.2	45.0
38	45.0	45.0	45.0	45.0	45.0	46.4	45.2	45.0	45.0
39	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
40	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
A	64.9	69.0	73.3	75.7	77.3	78.7	76.8	72.9	67.8
D	71.6	74.3	78.2	79.8	82.1	83.4	81.1	77.1	72.5
OASPL	81.8	82.7	83.0	82.9	84.8	85.8	84.3	82.2	78.5
PNL	78.3	81.3	85.1	87.3	89.0	90.6	88.2	84.2	80.3
PNLT	79.6	82.6	86.2	87.3	89.0	90.6	88.2	84.2	80.3

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

# TABLE F-VII

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 34, 115 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-3.0	-2.0	-1.0	0	1.0	2.0	3.0	4.0	6.0
17	64.1	63.5	63.7	64.3	65.8	65.4	66.1	68.3	69.7
18	69.3	68.2	68.1	56.8	63.6	59.9	61.1	61.9	64.4
19	64.2	63.6	63.9	62.9	60.1	60.1	62.0	59.9	62.9
20	59.2	59.4	57.8	60.5	69.5	81.4	82.5	73.4	57.5
21	64.3	63.2	62.9	74.5	79.9	80.6	74.9	67.8	57.1
22	50.9	53.6	62.6	68.8	69.6	68.7	69.7	68.7	63.1
23	56.3	60.9	66.8	70.5	68.9	64.6	65.8	69.4	67.5
24	66.2	69.9	75.5	78.3	75.4	68.6	68.4	66.3	63.9
25	61.9	61.6	63.9	65.8	71.0	73.3	72.5	72.6	59.5
26	64.3	63.8	64.2	72.2	73.6	71.2	71.5	69.4	64.5
27	58.3	60.4	70.1	72.4	71.4	72.8	72.4	72.6	63.8
28	64.0	64.7	69.4	73.0	72.4	71.3	71.0	70.7	62.9
29	63.2	60.5	70.3	72.5	71.7	73.2	72.1	69.0	61.4
30	56.9	61.4	68.5	71.8	71.2	72.6	70.7	58.0	59.2
31	55.5	58.2	67.6	71.0	70.7	71.4	69.5	67.4	58.5
32	56.2	57.7	66.0	69.6	69.8	70.0	68.0	66.0	56.6
33	53.4	56.1	64.4	68.0	67.6	68.1	65.5	62.0	53.0
34	50.5	52.6	62.6	66.2	66.2	66.1	62.4	60.2	50.3
35	47.2	49.1	59.6	63.6	64.1	62.7	59.9	57.7	47.4
36	45.0	45.4	54.7	60.5	61.5	59.7	56.6	54.1	45.3
37	45.0	45.0	48.4	53.9	54.7	54.3	52.1	49.4	45.0
38	45.0	45.0	45.0	46.7	48.1	48.8	47.3	45.9	45.0
39	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
40	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
A	69.0	70.1	77.9	80.5	80.0	80.5	78.9	77.1	69.4
D	73.8	74.8	82.0	85.2	85.3	85.3	83.3	81.3	73.5
OASPL	79.6	78.9	81.6	84.8	85.4	86.4	86.1	83.4	79.8
PNL	80.2	82.0	88.1	91.6	91.9	91.9	90.8	88.3	80.8
PNLT	81.3	83.5	88.1	91.6	91.9	91.9	90.8	88.3	80.8

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

**TABLE F-VII**  
**5 FOOT HOVER TEST**

**1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA**

SIKORSKY S-61

OCTOBER 28 1976

EVENT 1, 0 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	76.5	81.5	66.2	74.4	4.8
15	76.5	81.4	69.8	75.5	3.0
16	73.4	80.0	66.8	71.8	3.5
17	74.3	78.3	70.0	73.8	2.2
18	74.0	76.8	69.4	73.6	1.9
19	74.9	77.9	72.1	74.6	1.5
20	85.2	88.6	81.2	84.9	1.6
21	78.9	82.0	76.7	78.7	1.3
22	79.4	82.0	76.4	79.2	1.4
23	81.7	83.6	79.1	81.6	1.1
24	80.8	83.0	79.3	80.7	1.0
25	81.0	83.5	79.5	80.9	1.0
26	80.0	82.3	77.7	79.9	1.2
27	79.8	81.8	78.0	79.7	.9
28	79.9	81.9	77.3	79.8	1.1
29	80.2	82.8	76.9	80.0	1.4
30	79.9	82.7	76.5	79.6	1.5
31	79.6	82.7	75.9	79.3	1.6
32	78.8	82.4	74.5	78.4	1.8
33	73.3	76.4	69.6	73.0	1.6
34	68.2	70.9	65.1	68.0	1.4
35	66.1	68.1	63.1	65.9	1.3
36	64.4	65.9	62.3	64.3	.9
37	58.9	60.6	57.0	58.9	.8
38	55.0	55.0	55.0	55.0	.0
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	87.9	90.1	85.9	87.8	1.0
DBD	91.8	93.7	90.2	91.7	.9
OASPL	92.5	94.0	91.4	92.5	.7
PNL	99.6	101.9	97.5	99.4	1.1
PNLT	99.6	101.9	97.5	99.4	1.1

*270°  
(Microphone Location  
Relative to Helicopter)*

TABLE F-VII  
5 FOOT HOVER TEST  
1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 3, 45 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	70.8	74.6	62.5	69.8	3.3
15	71.2	75.1	65.5	70.6	2.2
16	66.8	70.5	63.0	66.4	1.9
17	71.0	74.5	67.4	70.7	1.6
18	70.9	74.4	68.5	70.7	1.5
19	74.5	77.8	70.6	74.0	2.0
20	85.0	87.8	80.3	84.5	2.0
21	78.8	81.2	76.2	78.6	1.3
22	78.0	80.4	75.0	77.7	1.6
23	82.4	84.1	80.3	82.3	1.1
24	81.9	84.1	79.4	81.7	1.2
25	83.0	85.8	79.3	82.7	1.6
26	81.4	84.3	78.1	81.0	1.7
27	80.7	82.7	73.3	80.6	1.2
28	80.5	82.7	77.9	80.4	1.2
29	81.1	83.8	78.2	80.9	1.4
30	79.8	83.5	76.4	79.5	1.5
31	78.2	82.0	74.5	78.0	1.5
32	76.6	80.0	71.9	76.2	2.0
33	74.1	78.8	68.9	73.4	2.4
34	72.8	77.8	67.8	72.1	2.4
35	69.3	73.0	65.6	68.9	2.0
36	65.5	68.2	62.3	65.2	1.6
37	59.5	61.9	57.3	59.3	1.2
38	55.3	56.4	55.0	55.3	.4
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	88.2	91.4	85.7	88.1	1.1
DBD	92.6	95.5	90.2	92.4	1.1
OASPL	92.6	93.8	90.5	92.5	.8
PNL	99.6	102.3	97.5	99.5	1.1
PNLT	99.6	102.3	97.5	99.5	1.1

225°  
(Microphone Location)  
(Relative to Helicopter)

**TABLE F-VII**  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 4, 90 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB: RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	68.8	72.1	59.9	67.9	3.0
15	73.9	77.1	67.4	73.4	2.4
16	68.0	70.5	64.0	67.7	1.6
17	77.9	83.8	71.1	76.5	3.5
18	77.8	83.2	71.8	76.6	3.1
19	79.2	85.2	73.6	77.9	3.0
20	84.7	88.2	80.7	84.0	2.3
21	83.0	88.8	78.6	82.1	2.6
22	83.0	85.8	78.7	82.4	2.3
23	84.8	88.2	80.5	84.4	2.0
24	84.7	87.5	81.5	84.4	1.6
25	84.4	87.0	80.1	84.1	1.7
26	84.0	87.2	79.6	83.6	1.8
27	82.0	85.3	78.4	81.6	2.0
28	79.8	83.1	75.8	79.4	1.9
29	79.5	82.8	75.1	79.0	2.0
30	76.9	80.1	72.2	76.4	2.1
31	75.0	78.4	71.2	74.5	2.1
32	74.9	78.6	70.3	74.2	2.6
33	72.1	76.2	66.1	71.3	2.7
34	70.2	73.4	64.3	69.6	2.3
35	68.1	71.1	63.5	67.6	2.1
36	64.7	67.7	60.9	64.3	1.9
37	59.4	62.3	56.0	59.1	1.7
38	55.6	57.2	55.0	55.5	.7
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	88.0	90.4	85.6	87.7	1.4
DBD	92.9	95.4	90.2	92.7	1.4
OASPL	94.1	97.3	91.2	93.8	1.7
PNL	100.1	102.9	97.2	99.8	1.5
PNLT	100.1	102.9	97.2	99.8	1.5

180°  
(Microphone Location  
Relative to Microphone)



*TABLE F-VII*  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 5, 135 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	67.1	72.6	62.0	66.2	2.6
15	81.0	84.0	78.3	80.8	1.5
16	72.7	74.4	71.2	72.6	.9
17	81.7	85.1	77.8	81.3	1.7
18	81.3	83.6	78.1	81.0	1.6
19	84.0	86.2	79.8	83.7	1.7
20	88.6	90.5	86.1	88.4	1.2
21	86.9	88.9	81.8	86.6	1.8
22	87.5	89.8	83.8	87.2	1.6
23	88.9	91.4	85.5	88.6	1.5
24	88.6	90.5	82.4	88.3	1.8
25	87.6	89.3	82.1	87.3	1.7
26	87.2	89.6	81.8	86.9	1.7
27	85.8	89.4	79.9	85.3	2.0
28	83.6	86.0	78.7	83.4	1.7
29	82.3	84.9	77.1	81.9	1.9
30	78.4	81.1	73.7	78.1	1.7
31	76.7	78.4	73.4	76.5	1.4
32	76.7	78.6	73.5	76.6	1.3
33	74.8	76.9	71.0	74.6	1.4
34	72.2	74.3	70.1	72.1	1.1
35	68.4	69.9	66.4	68.3	1.0
36	65.0	66.4	63.2	65.0	.8
37	59.5	60.7	57.9	59.4	.8
38	55.1	55.6	55.0	55.1	.2
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	91.1	93.2	87.2	91.0	1.3
DBD	96.0	97.7	92.8	95.9	1.1
OASPL	97.7	99.6	94.7	97.5	1.2
PNL	103.2	104.7	100.2	103.0	1.0
PNLT	103.2	104.7	100.2	103.0	1.0

135°  
(Microphone Location  
Relative to Helicopter)

# TABLE F-VII

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 6, 180 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	66.0	71.2	60.1	64.5	3.5
15	80.2	84.0	73.3	79.4	2.8
16	71.9	74.9	68.5	71.5	1.9
17	77.0	79.0	72.6	76.8	1.6
18	76.6	79.9	72.9	76.2	1.8
19	76.7	78.8	73.1	76.5	1.6
20	87.3	90.7	84.5	87.0	1.7
21	81.6	84.2	79.0	81.4	1.3
22	81.8	84.3	79.3	81.6	1.2
23	84.3	86.1	81.2	84.1	1.2
24	83.1	85.0	79.7	82.0	1.3
25	84.0	86.3	81.8	83.9	1.1
26	83.1	85.0	79.9	82.9	1.4
27	82.8	84.3	78.9	82.5	1.6
28	82.0	83.7	76.8	81.7	1.7
29	80.2	81.1	76.3	79.9	1.6
30	77.4	78.6	72.6	77.1	1.8
31	75.0	77.2	70.9	74.6	1.8
32	73.4	75.5	69.9	73.1	1.7
33	70.0	72.3	66.8	69.8	1.6
34	68.0	70.4	65.7	67.8	1.4
35	65.7	67.6	63.7	65.6	1.2
36	63.2	64.8	61.4	63.1	.9
37	58.7	60.6	56.8	58.6	1.0
38	55.3	56.4	55.0	55.3	.4
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	87.9	89.1	84.7	87.8	1.2
DBD	92.4	93.6	89.7	92.3	1.0
OASPL	94.1	95.7	92.3	94.1	.8
PNL	99.5	101.2	97.1	99.4	1.0
PNLT	99.5	101.2	97.1	99.4	1.0

90°

(Microphone location  
Relative to Helicopter)

TABLE F-VI  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 7, 225 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	62.1	68.0	57.1	60.9	3.0
15	69.5	74.1	65.4	69.0	2.0
16	65.0	66.7	62.0	64.9	1.1
17	71.8	74.3	66.6	71.5	1.8
18	72.0	74.9	67.3	71.3	1.6
19	73.4	75.0	71.2	73.3	1.2
20	77.3	80.8	73.8	76.7	2.1
21	75.2	77.1	72.2	74.9	1.5
22	75.1	77.6	72.6	74.9	1.5
23	78.7	81.4	75.4	78.5	1.4
24	78.0	81.8	74.2	77.5	2.0
25	80.2	85.2	75.5	79.5	2.4
26	80.0	84.7	75.7	79.4	2.3
27	80.1	84.9	75.5	79.5	2.3
28	78.6	83.2	74.5	78.0	2.1
29	77.6	81.2	75.1	77.3	1.6
30	74.8	77.2	72.6	74.6	1.2
31	73.4	77.1	71.0	73.1	1.5
32	71.8	75.8	68.9	71.4	1.6
33	68.0	70.2	65.4	67.9	1.1
34	66.3	68.5	64.7	66.2	1.0
35	64.2	66.1	62.6	64.1	1.0
36	61.4	62.7	60.1	61.4	.7
37	57.5	59.1	55.0	57.4	.7
38	55.1	55.7	55.0	55.1	.2
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	85.0	89.1	81.9	84.6	1.7
DED	89.1	92.8	86.3	88.8	1.6
OASPL	89.4	93.0	86.5	89.2	1.5
PNL	96.1	99.5	93.2	95.9	1.5
PNLT	96.1	99.5	93.2	95.9	1.5

45°  
(Microphone Location  
relative to Helicopter)

TABLE F-VII  
S HOI HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 8, 270 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	70.4	76.5	60.6	69.0	3.6
15	72.3	75.8	65.4	71.7	2.4
16	67.1	70.6	63.8	66.8	1.7
17	71.6	74.7	66.8	71.2	1.7
18	72.0	74.9	69.4	71.8	1.4
19	72.7	74.9	68.9	72.4	1.6
20	75.1	77.2	71.4	74.7	1.7
21	76.5	80.7	73.0	76.0	2.0
22	76.7	79.5	72.0	76.3	1.8
23	79.0	81.1	74.1	78.7	1.7
24	80.8	83.6	77.2	80.5	1.7
25	82.2	85.2	77.8	81.7	2.2
26	81.6	85.9	76.5	80.9	2.5
27	80.0	84.6	76.2	79.5	2.1
28	77.4	79.8	73.5	77.0	1.9
29	77.5	80.5	73.7	77.1	1.9
30	75.3	78.1	71.6	75.0	1.8
31	73.7	75.9	69.5	73.4	1.7
32	72.1	74.4	68.5	71.8	1.6
33	68.5	71.5	65.2	68.3	1.6
34	67.4	70.0	64.0	67.1	1.5
35	64.6	66.4	61.8	64.4	1.3
36	62.1	63.7	59.8	62.0	1.1
37	57.5	59.3	55.8	57.5	.8
38	55.0	55.2	55.0	55.0	.1
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	85.4	87.5	81.9	85.1	1.7
DBD	89.8	92.0	86.3	89.5	1.6
OASPL	90.3	93.3	86.8	90.0	1.6
PNL	96.9	99.5	93.5	96.6	1.6
PNLT	96.9	99.5	93.5	96.6	1.6

0°  
(Microphone Location  
Relative to Helicopter)

**TABLE F-VII**  
**5 FOOT HOVER TEST**

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 9, 315 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	69.7	76.3	61.8	68.0	3.8
15	70.3	74.6	64.2	69.7	2.4
16	66.5	71.5	62.8	65.9	2.0
17	72.6	74.3	69.4	72.5	1.3
18	71.3	73.2	68.8	71.1	1.3
19	72.9	75.2	70.2	72.7	1.1
20	78.2	79.6	75.3	78.0	1.4
21	75.4	76.5	73.2	75.3	1.0
22	75.9	77.1	73.9	75.8	.9
23	78.2	79.7	76.0	78.1	1.0
24	78.3	79.7	74.7	78.2	1.1
25	79.4	82.7	76.6	79.2	1.5
26	79.3	83.2	76.5	79.0	1.6
27	78.9	81.9	75.7	78.6	1.4
28	78.1	81.2	74.8	77.9	1.4
29	77.2	79.7	72.6	76.9	1.6
30	74.0	78.0	70.2	73.7	1.7
31	71.8	73.9	69.4	71.6	1.2
32	71.3	73.2	69.2	71.2	1.1
33	68.9	71.0	66.1	68.7	1.2
34	67.7	69.3	65.5	67.7	.9
35	65.2	66.2	63.5	65.2	.7
36	63.4	64.5	61.4	63.3	.7
37	59.3	60.4	57.5	59.3	.7
38	55.9	57.3	55.0	55.9	.7
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	84.4	87.1	81.9	84.3	1.0
DED	88.8	91.1	87.2	88.7	.9
OASPL	89.3	91.3	87.1	89.3	.8
PNL	96.0	98.2	93.9	95.9	.9
PNLI	96.0	98.2	93.9	95.9	1.0

315°  
(Microphone Location  
Relative to Helicopter)

# TABLE F-VII

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 1, 0 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	67.7	75.5	63.3	67.0	2.1
15	76.4	79.2	73.7	76.2	1.2
16	72.0	75.2	69.8	71.8	1.3
17	73.2	75.6	70.1	73.0	1.6
18	74.7	76.8	73.0	74.6	.9
19	73.1	74.8	71.7	73.1	.7
20	82.6	86.0	77.8	81.9	2.5
21	76.1	77.3	73.0	76.0	1.2
22	74.5	76.3	72.8	74.4	1.0
23	73.5	75.8	71.4	73.4	1.1
24	70.0	73.4	66.7	69.6	1.9
25	70.7	72.9	66.1	70.4	1.8
26	71.2	72.9	67.9	71.0	1.5
27	72.5	74.4	69.9	72.4	1.1
28	73.2	75.0	70.3	73.1	1.1
29	73.8	76.6	71.0	73.5	1.4
30	73.2	75.9	69.8	72.9	1.6
31	72.5	75.4	69.9	72.4	1.2
32	71.7	73.5	68.6	71.5	1.3
33	68.8	71.2	65.4	68.5	1.5
34	67.9	69.5	64.7	67.7	1.3
35	66.6	68.2	64.2	66.5	.9
36	64.2	66.4	62.0	64.1	1.0
37	61.0	62.7	59.2	60.9	.8
38	57.6	59.3	56.2	57.5	.8
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	81.8	83.3	79.3	81.7	1.0
DBD	86.8	87.9	84.6	86.7	.9
OASPL	88.0	89.0	86.6	88.0	.6
PNL	94.3	95.4	92.2	94.2	.8
PNLT	94.3	95.4	92.2	94.2	.8

90°

(Microphone Location  
Relative to Helicopter)

*TABLE F-VII*  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 3, 45 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	74.3	80.1	67.7	73.2	3.1
15	74.8	78.2	70.5	74.4	1.8
16	75.5	79.1	69.6	74.8	2.6
17	74.6	76.4	71.4	74.4	1.2
18	73.5	76.8	69.8	73.2	1.6
19	73.5	79.0	70.6	72.9	2.1
20	76.9	79.2	73.3	76.6	1.7
21	74.6	76.1	72.4	74.4	1.1
22	73.9	75.9	71.7	73.8	1.2
23	73.1	75.4	70.1	72.9	1.3
24	69.6	71.3	67.1	69.4	1.2
25	70.2	73.4	67.0	70.0	1.5
26	71.8	75.0	67.8	71.4	1.8
27	73.5	76.5	69.1	73.1	1.8
28	72.4	74.9	68.9	72.1	1.6
29	72.1	74.4	68.6	71.9	1.5
30	70.1	72.2	66.0	69.9	1.5
31	71.6	73.2	67.4	71.4	1.4
32	71.0	72.5	67.5	70.8	1.4
33	68.8	70.5	65.5	68.7	1.2
34	68.5	70.2	65.6	68.4	1.1
35	67.6	68.9	64.9	67.6	.9
36	65.2	66.3	62.8	65.2	.8
37	62.0	63.2	59.8	62.0	.8
38	58.6	59.6	56.4	58.6	.7
39	55.1	55.7	55.0	55.1	.2
40	55.0	55.0	55.0	55.0	.0
DEA	81.1	82.6	78.2	81.0	1.2
DBD	86.6	87.9	84.3	86.5	1.1
OASPL	87.0	88.7	85.2	86.9	.8
PNL	94.2	95.4	92.2	94.1	.9
PNLT	94.2	95.4	92.2	94.1	.9

45°  
(Microphone Location  
Relative to Helicopter)

**TABLE F-VII**  
**5 FOOT HOVER TEST**

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 4, 90 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	67.2	72.8	60.7	65.9	3.3
15	72.8	76.9	69.3	72.3	2.1
16	69.0	72.8	66.0	68.7	1.7
17	71.7	74.5	67.5	71.3	1.9
18	73.7	76.2	71.6	73.5	1.1
19	72.0	73.8	70.1	71.9	.9
20	74.1	77.4	71.0	73.8	1.7
21	74.4	75.9	72.4	74.3	1.0
22	72.4	73.7	70.5	72.3	.7
23	71.7	75.9	69.5	71.4	1.5
24	69.1	71.7	66.7	68.9	1.2
25	70.2	72.8	66.5	69.9	1.5
26	71.1	74.9	67.9	70.8	1.8
27	72.6	76.2	69.2	72.2	1.9
28	72.6	75.7	68.7	72.2	2.0
29	73.3	77.7	68.4	72.6	2.6
30	72.4	77.1	67.3	71.4	2.9
31	71.5	74.9	66.4	70.8	2.5
32	70.4	74.0	66.4	70.0	2.0
33	67.9	69.8	65.1	67.7	1.3
34	67.7	70.1	65.8	67.6	1.0
35	65.5	68.0	64.5	65.5	.8
36	63.8	65.9	62.5	63.8	.7
37	59.8	61.3	58.4	59.7	.6
38	56.5	57.6	55.2	56.4	.5
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	80.9	83.5	77.8	80.6	1.8
DBD	85.7	88.2	83.1	85.5	1.3
OASPL	85.5	87.3	83.9	85.5	.9
PNL	93.3	95.4	91.3	93.2	1.1
PNLT	93.3	95.4	91.3	93.2	1.1

0°  
(Microphone Location  
Relative to Helicopter)



# TABLE F-VII

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 5, 135 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	68.0	71.6	63.1	67.6	2.0
15	76.6	78.3	74.1	76.5	1.2
16	71.6	73.2	68.8	71.5	1.0
17	74.1	77.4	69.8	73.6	2.2
18	73.5	74.8	71.5	73.4	.8
19	72.8	74.0	70.3	72.7	.8
20	79.2	83.5	75.0	78.6	2.2
21	74.6	75.7	72.6	74.6	.7
22	73.2	75.3	69.9	73.0	1.3
23	74.6	77.1	72.7	74.5	1.1
24	73.7	76.9	70.3	73.3	1.8
25	77.2	80.1	73.9	76.8	1.9
26	77.2	80.3	73.3	76.8	1.9
27	78.7	81.1	74.3	78.4	1.7
28	78.8	81.5	75.4	78.5	1.8
29	78.7	82.2	74.1	78.3	2.0
30	76.4	80.4	72.2	75.6	2.3
31	75.8	78.9	71.2	75.4	2.0
32	74.5	76.3	71.2	74.4	1.0
33	72.5	74.8	69.5	72.3	1.3
34	71.4	73.7	68.9	71.2	1.3
35	68.7	70.9	66.1	68.5	1.1
36	67.3	68.8	64.5	67.2	1.1
37	63.8	65.4	61.6	63.7	.9
38	60.7	62.8	58.2	60.6	1.0
39	56.5	58.4	55.0	56.4	.8
40	55.0	55.0	55.0	55.0	.0
DBA	85.8	87.8	83.3	85.5	1.4
DBD	90.1	92.0	87.9	90.0	1.2
OASPL	89.2	90.9	87.7	89.1	.9
PNL	97.3	99.1	95.3	97.1	1.0
PNLT	97.3	99.1	95.3	97.1	1.0

315°

(Microphone Location  
Relative to Helicopter)

TABLE F-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 6, 180 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	65.5	69.3	60.0	64.7	2.7
15	72.0	75.1	67.4	71.5	2.2
16	72.1	74.4	68.9	71.9	1.3
17	75.4	77.9	71.6	75.1	1.7
18	75.3	79.3	72.7	75.0	1.6
19	75.7	79.3	73.8	75.5	1.2
20	82.0	85.2	78.1	81.6	2.0
21	75.7	77.5	73.9	75.6	.9
22	72.6	74.0	70.6	72.5	1.1
23	77.6	79.6	70.9	77.0	2.4
24	74.4	76.6	70.5	74.1	1.6
25	76.7	79.6	72.4	76.3	1.8
26	76.9	80.1	72.2	76.6	1.9
27	78.6	81.1	73.7	78.2	1.9
28	78.9	81.7	73.2	78.4	2.1
29	79.0	83.0	74.1	78.4	2.4
30	77.6	82.3	72.7	76.9	2.4
31	75.9	80.3	70.9	75.1	2.5
32	74.7	80.1	69.3	73.5	3.0
33	72.2	77.5	65.6	70.6	3.5
34	70.2	75.9	64.3	68.9	3.2
35	67.0	71.0	62.9	66.4	2.3
36	64.1	66.9	61.5	63.9	1.6
37	59.9	62.1	57.8	59.8	1.2
38	56.0	56.8	55.0	55.9	.5
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	85.7	89.1	81.4	85.2	2.1
DBD	89.7	93.5	85.8	89.2	2.1
OASPL	89.8	91.6	87.3	89.6	1.2
PNL	97.0	100.3	93.9	96.5	2.0
PNLT	97.0	100.3	93.9	96.5	2.0

270°  
(Microphone Location  
Relative to Helicopter)

TABLE F-VII  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 7, 225 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DE RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	71.3	76.1	62.9	69.8	3.9
15	74.7	77.9	67.5	74.2	2.2
16	74.8	82.5	66.4	72.4	4.0
17	73.4	77.1	68.8	72.9	2.1
18	73.2	75.4	71.5	73.1	1.1
19	74.0	79.1	70.3	73.4	2.0
20	82.2	85.4	77.1	81.8	1.9
21	75.7	77.5	73.5	75.6	.9
22	71.7	73.7	69.1	71.5	1.3
23	73.5	77.0	70.8	73.2	1.5
24	70.2	72.8	66.3	69.8	1.9
25	74.4	78.7	69.4	73.6	2.7
26	73.0	76.4	68.4	72.4	2.4
27	74.3	77.3	68.6	73.5	2.6
28	74.0	76.6	68.8	73.5	2.2
29	75.0	78.5	71.2	74.5	2.1
30	73.7	77.7	69.0	73.2	2.1
31	72.6	77.1	68.1	72.1	2.2
32	70.1	74.1	65.2	69.6	2.1
33	66.6	69.6	61.3	65.2	2.0
34	65.8	68.6	60.4	65.4	2.1
35	63.8	66.6	58.0	63.4	1.9
36	61.7	64.1	56.7	61.4	1.6
37	58.3	60.4	55.0	58.1	1.3
38	55.4	56.5	55.0	55.3	.4
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	81.8	85.2	77.6	81.4	2.0
DBD	86.0	88.7	82.1	85.7	1.7
OASPL	87.7	89.8	85.3	87.5	1.2
PNL	93.5	96.3	90.3	93.3	1.4
PNLT	93.5	96.3	90.3	93.3	1.4

225°  
(Microphone Location)  
(Relative to Helicopter)

# TABLE F-VII

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 8, 270 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	66.4	70.4	58.8	65.3	3.5
15	73.3	74.9	68.8	73.1	1.5
16	70.2	73.1	64.5	69.8	2.1
17	72.0	74.1	69.5	71.8	1.2
18	74.5	76.6	72.3	74.4	1.0
19	73.6	75.0	72.6	73.6	.7
20	83.4	84.5	81.0	83.3	.9
21	77.4	80.2	75.3	77.2	1.4
22	71.9	73.5	70.4	71.8	.8
23	72.6	74.3	70.2	72.5	1.0
24	65.6	68.4	61.8	65.4	1.5
25	67.7	70.2	65.3	67.5	1.2
26	67.7	71.8	64.2	67.3	1.8
27	69.9	74.4	65.7	69.4	2.2
28	69.0	72.3	66.7	68.7	1.7
29	68.8	72.3	66.0	68.4	1.8
30	67.3	70.3	65.2	67.1	1.3
31	67.3	69.2	64.8	67.2	1.2
32	67.2	70.3	64.3	67.0	1.4
33	65.1	68.1	62.2	64.9	1.5
34	64.0	68.1	61.3	63.7	1.7
35	62.5	64.5	60.2	62.3	1.1
36	60.6	62.3	58.8	60.5	.8
37	57.6	59.1	55.8	57.6	.8
38	55.3	56.1	55.0	55.2	.3
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	77.5	80.3	75.5	77.3	1.3
DBD	83.4	85.5	81.6	83.2	1.0
OASPL	86.6	87.8	85.5	86.6	.7
PNL	91.8	93.6	90.5	91.7	.8
PNLT	91.8	93.6	90.5	91.7	.8

180°  
(Microphone Location  
Relative to Helicopter)

# TABLE F-VII

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 9, 315 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	66.5	68.9	62.0	66.1	1.9
15	76.3	78.2	74.2	76.1	1.2
16	71.6	73.0	70.0	71.5	.8
17	72.8	75.1	70.3	72.6	1.2
18	74.5	76.0	72.8	74.4	.9
19	73.4	76.3	70.9	73.2	1.2
20	83.8	86.1	80.6	83.6	1.5
21	77.7	79.6	75.2	77.5	1.1
22	71.8	73.0	70.1	71.7	.8
23	70.9	73.3	68.2	70.7	1.2
24	67.5	70.7	64.4	67.1	1.9
25	69.0	72.7	65.6	68.4	2.1
26	68.0	70.4	64.8	67.6	1.7
27	69.4	71.4	66.4	69.1	1.5
28	69.4	71.6	66.0	69.1	1.5
29	69.9	72.1	67.0	69.7	1.4
30	69.1	70.6	65.1	68.9	1.4
31	68.5	69.7	65.7	68.3	1.1
32	66.8	69.2	64.3	66.6	1.1
33	63.1	64.8	60.9	63.0	1.0
34	61.9	63.3	60.4	61.8	.9
35	60.8	62.2	59.6	60.8	.8
36	59.3	60.6	57.8	59.2	.8
37	56.2	57.4	55.0	56.1	.7
38	55.0	55.0	55.0	55.0	.0
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	77.8	79.6	75.1	77.6	1.1
DBD	82.9	84.7	80.7	82.8	1.0
OASPL	86.9	88.1	85.6	86.8	.8
PNL	91.7	93.2	90.0	91.6	1.0
PNLT	91.7	93.2	90.0	91.6	1.0

135°

(Microphone Location  
Relative to Helicopter)

# TABLE F-VII

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 1, 0 DEGREES, MICROPHONE 75 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	70.2	75.1	66.0	69.4	2.6
15	77.6	81.6	73.9	77.4	1.5
16	71.9	73.3	69.3	71.9	.8
17	77.1	80.9	72.8	76.6	2.1
18	77.1	80.5	73.9	76.7	1.8
19	78.9	82.1	76.2	78.6	1.5
20	89.4	92.9	85.8	89.1	1.4
21	83.4	87.2	81.0	83.1	1.5
22	83.9	87.3	80.6	83.7	1.4
23	86.1	88.5	83.9	86.0	1.1
24	85.3	87.4	83.7	85.2	1.0
25	85.4	87.0	83.2	85.3	.9
26	84.7	86.0	82.7	84.6	.8
27	85.0	86.7	82.4	84.9	.9
28	84.7	86.6	81.8	84.6	1.1
29	84.6	86.5	82.2	84.5	1.0
30	84.4	87.3	82.1	84.3	1.2
31	84.0	87.3	81.8	83.7	1.4
32	83.1	86.2	80.1	82.8	1.6
33	80.0	83.2	77.0	79.7	1.7
34	76.6	79.4	73.7	76.3	1.4
35	74.0	76.2	71.8	73.9	1.0
36	71.0	72.7	69.6	70.9	.7
37	66.9	68.0	65.8	66.8	.6
38	62.3	63.5	61.4	62.3	.6
39	58.7	59.6	57.8	58.7	.5
40	56.3	56.8	55.5	56.3	.4
DBA	92.7	95.2	91.0	92.6	1.0
DBD	97.0	99.3	94.9	96.9	1.0
OASPL	96.9	98.2	95.6	96.8	.7
PNL	104.5	106.6	102.6	104.4	1.0
PNLT	104.5	106.6	102.6	104.4	1.0

270°

(Microphone Location  
Relative to Helicopter)

TABLE F-VII  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 3, 45 DEGREES, MICROPHONE 75 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	68.2	73.1	63.4	67.6	2.3
15	74.3	77.2	68.9	73.7	2.3
16	68.8	70.5	66.7	68.7	1.2
17	73.4	76.8	69.7	73.0	1.8
18	74.2	78.1	71.0	73.9	1.7
19	77.3	80.9	73.0	76.9	1.8
20	88.8	91.2	85.0	88.4	1.8
21	82.2	85.0	80.0	82.1	1.2
22	80.3	83.0	77.8	80.3	1.3
23	85.1	86.9	82.4	84.9	1.2
24	84.2	86.1	81.5	84.1	1.0
25	85.1	86.7	82.4	85.0	1.0
26	83.5	85.5	80.2	83.3	1.2
27	83.6	86.2	80.4	83.4	1.5
28	81.9	84.4	79.2	81.7	1.4
29	82.8	85.5	79.4	82.4	1.7
30	81.4	84.4	78.4	81.2	1.6
31	80.1	82.6	77.1	79.9	1.5
32	79.4	82.2	75.5	79.1	1.7
33	78.6	81.3	73.0	78.2	2.1
34	78.1	81.3	71.2	77.5	2.5
35	75.5	78.2	69.8	75.1	2.1
36	72.6	74.8	68.3	72.3	1.8
37	68.1	69.9	64.7	67.9	1.5
38	63.8	65.6	60.9	63.6	1.3
39	59.1	60.3	57.3	59.0	.9
40	55.5	56.3	55.0	55.5	.4
DBA	90.8	92.9	88.3	90.7	1.2
DBD	96.1	98.1	93.3	95.9	1.3
OASPL	95.2	97.1	93.6	95.1	.8
PNL	103.4	105.6	100.5	103.3	1.3
PNLT	103.4	105.6	100.5	103.3	1.3

225°  
(Microphone Location  
Relative to Helicopter)

**TABLE F-VII**  
**5 FOOT HOVER TEST**

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 1, 0 DEGREES, MICROPHONE 75 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	72.6	76.5	65.7	71.4	3.5
15	82.4	84.4	80.2	82.3	1.0
16	76.2	77.4	73.6	76.1	.9
17	78.6	81.9	75.2	78.3	1.6
18	78.3	80.1	76.6	78.3	.9
19	78.8	80.5	76.7	78.7	.8
20	87.6	90.8	82.9	87.1	2.1
21	81.0	82.6	79.1	80.9	.9
22	79.8	81.4	77.9	79.7	.8
23	78.3	80.6	76.2	78.1	1.1
24	69.4	72.9	66.3	69.1	1.7
25	70.4	72.9	66.9	70.1	1.5
26	74.8	76.9	71.9	74.6	1.3
27	79.1	81.0	75.8	78.9	1.3
28	81.0	83.2	77.0	80.7	1.7
29	83.0	86.0	79.3	82.6	2.0
30	83.2	86.6	78.9	82.7	2.1
31	82.4	85.2	79.7	82.1	1.7
32	79.7	82.3	77.3	79.5	1.4
33	76.3	78.4	73.6	76.1	1.1
34	74.7	76.3	72.8	74.6	1.0
35	74.2	75.7	72.3	74.1	.9
36	73.0	74.7	71.5	72.9	.8
37	71.1	72.6	69.2	71.1	.8
38	69.3	70.5	67.2	69.2	.8
39	67.0	68.4	65.3	67.0	.8
40	63.7	64.8	62.1	63.7	.7
DBA	89.8	92.0	87.8	89.6	1.3
DBD	94.4	96.1	92.9	94.3	1.0
OASPL	94.1	95.9	92.8	94.0	.8
PNL	101.7	103.3	100.5	101.6	.9
PNLT	101.7	103.3	100.5	101.6	.9

*90°  
(Microphone Location  
Relative to Helicopter)*



# TABLE F-VII

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 3, 45 DEGREES, MICROPHONE 75 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	67.0	70.0	62.9	66.5	2.0
15	75.9	78.9	71.5	75.3	2.0
16	71.2	72.8	69.4	71.1	.8
17	76.7	80.2	74.0	76.4	1.5
18	76.1	78.3	72.2	75.9	1.3
19	76.4	78.7	74.3	76.3	.9
20	81.1	83.5	77.6	80.9	1.5
21	78.9	80.7	77.4	78.8	.8
22	78.0	80.1	75.8	77.9	1.0
23	75.9	78.5	73.6	75.8	1.2
24	66.5	68.3	64.5	66.3	1.2
25	67.8	70.6	63.9	67.5	1.6
26	71.6	73.6	67.8	71.4	1.4
27	75.8	78.3	72.5	75.5	1.6
28	77.7	79.7	75.0	77.5	1.2
29	79.1	81.3	76.3	78.9	1.3
30	78.0	80.3	75.6	77.8	1.1
31	78.1	80.1	75.8	78.0	1.0
32	76.2	78.8	73.8	76.1	1.2
33	74.7	77.1	72.6	74.5	1.3
34	73.5	75.2	71.3	73.4	1.0
35	73.8	75.8	71.3	73.7	1.1
36	72.9	74.4	71.0	72.8	1.0
37	71.3	72.9	69.4	71.2	1.0
38	70.1	72.0	68.0	70.0	1.1
39	68.3	70.0	65.7	68.1	1.2
40	65.9	67.5	63.6	65.8	1.1
DEA	86.9	88.8	85.4	86.8	.9
DBD	92.7	94.4	91.1	92.6	.9
OASPL	91.0	92.1	90.2	91.0	.5
PNL	99.9	101.4	98.2	99.8	1.0
PNLT	99.9	101.4	98.2	99.8	1.0

45°  
(Microphone Location  
Relative to Helicopter)

# TABLE F-VII

500 FT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 23, 0 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	71.9	76.2	65.7	71.1	2.7
15	71.3	74.6	67.2	70.8	2.1
16	67.1	70.4	63.1	66.5	2.3
17	67.1	69.8	64.7	66.9	1.4
18	65.0	66.6	62.9	64.9	.9
19	62.4	64.3	59.9	62.3	1.1
20	61.9	64.6	58.8	61.7	1.4
21	71.8	76.2	62.4	70.5	3.8
22	77.8	80.6	68.6	76.8	3.4
23	82.1	84.3	74.0	81.3	3.0
24	80.0	82.5	74.4	79.6	2.1
25	78.6	82.1	65.9	77.3	4.1
26	81.9	83.6	75.3	81.5	1.9
27	77.7	79.2	74.2	77.5	1.0
28	78.2	79.4	75.8	78.1	.9
29	77.2	78.3	74.3	77.1	1.0
30	75.5	77.2	72.5	75.4	1.1
31	73.3	74.5	70.6	73.2	1.1
32	71.1	72.2	67.9	71.0	1.0
33	66.7	67.9	64.3	66.6	.9
34	62.9	64.3	60.2	62.8	1.1
35	59.1	60.3	55.9	59.0	1.1
36	54.4	56.4	52.2	54.3	.9
37	49.4	51.6	46.3	49.2	1.1
38	45.6	47.0	45.0	45.6	.5
39	45.0	45.0	45.0	45.0	.0
40	45.0	45.0	45.0	45.0	.0
DBA	84.7	86.0	80.8	84.6	1.2
DBD	88.7	90.2	84.0	88.4	1.5
OASPL	89.8	91.3	85.5	89.6	1.5
PNL	95.3	96.7	90.6	95.1	1.5
PNLT	95.3	96.7	90.6	95.1	1.5

270°  
(Microphone Location  
Relative to Helicopter)

# TABLE F-VII

500 FT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 23, 0 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	68.7	74.4	63.4	67.5	2.9
15	74.2	77.7	68.7	73.8	2.1
16	68.2	72.3	63.5	67.7	2.1
17	70.0	73.9	66.1	69.5	2.2
18	68.8	71.4	64.4	68.5	1.5
19	64.6	67.1	58.6	64.1	2.0
20	62.4	66.2	57.8	61.8	2.2
21	72.3	75.2	68.6	71.9	2.0
22	77.7	81.1	73.5	77.3	2.0
23	81.8	84.4	78.1	81.5	1.5
24	78.6	80.0	74.6	78.5	1.2
25	76.5	80.6	70.6	75.4	3.1
26	80.5	82.4	77.9	80.4	1.1
27	77.8	80.9	75.1	77.4	1.8
28	78.6	80.1	77.3	78.5	.8
29	77.0	79.7	75.0	76.8	1.3
30	74.3	77.1	72.4	74.1	1.4
31	71.7	74.4	69.6	71.5	1.5
32	69.7	71.9	67.3	69.5	1.3
33	65.9	68.2	63.0	65.7	1.4
34	62.4	64.3	60.1	62.2	1.2
35	59.5	60.8	57.3	59.4	1.1
36	54.3	55.9	52.0	54.2	1.1
37	49.6	52.0	47.5	49.5	1.1
38	45.4	46.9	45.0	45.4	.5
39	45.0	45.0	45.0	45.0	.0
40	45.0	45.0	45.0	45.0	.0
DBA	83.9	86.1	81.8	83.8	1.1
DBD	87.7	90.0	85.4	87.5	1.1
OASPL	88.9	91.2	86.4	88.7	1.2
PWL	94.6	96.6	92.4	94.4	1.0
PNLT	94.6	96.6	92.4	94.4	1.0

90°  
(Microphone Location  
Relative to Helicopter)

*TABLE F-VII*  
500 FT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 23 , 0 DEGREES, CENTERLINE MIC. ( HARD SITE )

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	70.7	74.4	63.3	69.9	2.9
15	72.1	74.7	67.6	71.8	1.7
16	67.7	70.8	63.8	67.2	2.1
17	68.5	71.1	64.8	68.2	1.7
18	64.8	67.6	61.9	64.6	1.3
19	66.6	70.3	61.3	66.0	2.4
20	81.6	84.7	78.7	81.3	1.6
21	82.9	85.0	75.8	82.3	2.4
22	84.3	86.8	75.2	83.7	2.6
23	79.5	81.2	73.4	79.2	1.8
24	86.8	88.4	78.8	86.5	2.0
25	85.7	87.9	81.0	85.5	1.4
26	85.8	87.4	81.5	85.7	1.1
27	84.2	85.6	80.9	84.1	1.1
28	83.0	84.8	80.6	82.9	.9
29	80.7	82.2	78.7	80.6	.9
30	77.3	79.2	75.6	77.1	1.0
31	75.5	77.1	74.0	75.4	1.0
32	73.1	75.1	71.8	73.0	.9
33	69.1	70.4	67.6	69.1	.8
34	65.8	67.0	64.4	65.8	.7
35	62.3	63.4	61.0	62.3	.5
36	57.7	58.6	56.7	57.7	.5
37	53.0	53.7	51.8	53.0	.5
38	48.5	49.1	48.1	48.5	.3
39	45.0	45.0	45.0	45.0	.0
40	45.0	45.0	45.0	45.0	.0
DBA	89.2	90.3	86.0	89.1	.9
DBD	93.3	94.3	89.6	93.2	.9
OASPL	94.6	95.6	90.0	94.4	1.2
PNL	99.7	100.7	96.2	99.6	.8
PNLT	99.7	100.7	96.2	99.6	.8

( Helicopter Landing  
Directly Overhead )

TABLE F-VIII  
Helicopter Noise Level Data  
SIKORSKY S61 OCTOBER 28, 1976

MAX RMS Noise Level - dBA re 20 mPa

HELICOPTER OPERATION	RUN NUMBER	MICROPHONE OFFSET TO THE WEST		MICROPHONE OFFSET TO THE EAST	
		150M	75M	75M	150M
5 FT. HOVER 0°	1 10	90.5 87.5	95.0 92.3	92.8 90.3	86.3 83.0
		(270°)		(90°)	
5 FT. HOVER 45°	3 11	91.3 89.3	93.5 94.5	89.0 89.0	85.0 81.8
		(225°)		(45°)	
5 FT. HOVER 90°	4 12	94.3 92.3	96.8 96.3	88.5 90.8	86.0 83.0
		(180°)		(0°)	
5 FT. HOVER 135°	5 13	93.8 96.3	98.5 98.3	93.3 94.5	87.8 86.8
		(135°)		(315°)	
5 FT. HOVER 180°	6 14	91.3 93.0	94.0 95.0	95.0 95.5	89.5 89.0
		(90°)		(270°)	
5 FT. HOVER 225°	7	89.0	92.0	94.8	85.5
		(45°)		(225°)	
5 FT. HOVER 270°	8	88.0	91.0	88.0	80.5
		(0°)		(180°)	
5 FT. HOVER 315°	9	87.5	90.5	88.8	79.0
		(315°)		(135°)	
500 FT. HOVER 0°	23	85.8	89.5*	88.8*	85.5
		(270°)		(90°)	
500 FT. HOVER 90°	24	86.0	90.5*	89.5*	84.0
		(180°)		(0°)	

\* microphone at centerline

TABLE F-VIII  
Helicopter Noise Level Data  
SIKORSKY S-61

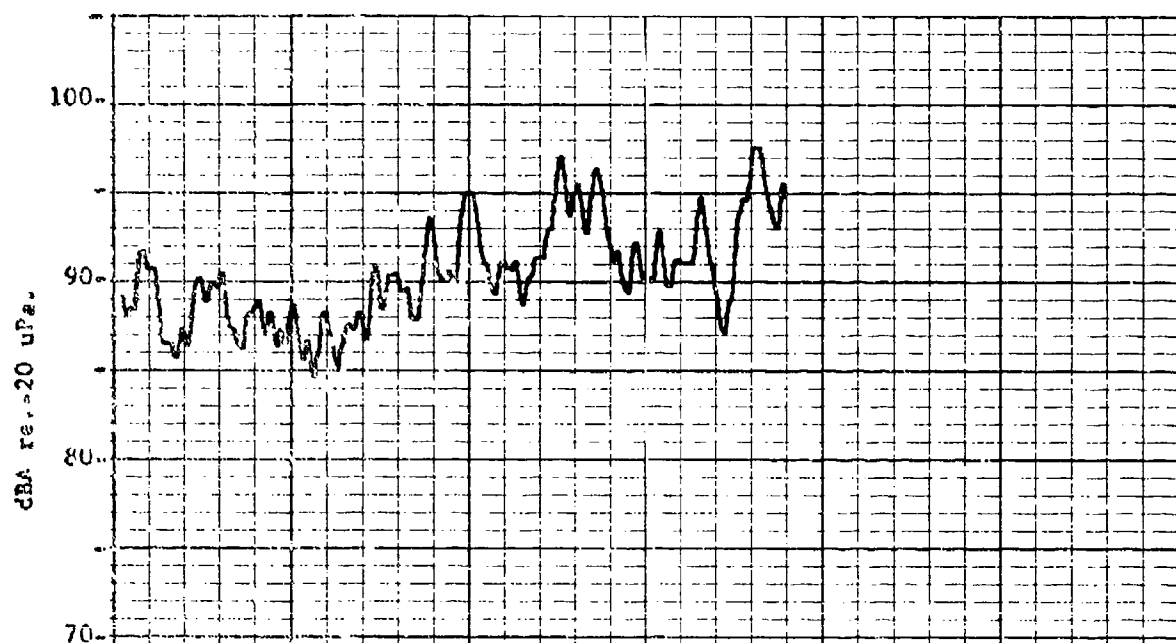
OCTOBER 28, 1976

max RMS Noise Level - 68A re 20  $\mu$ P

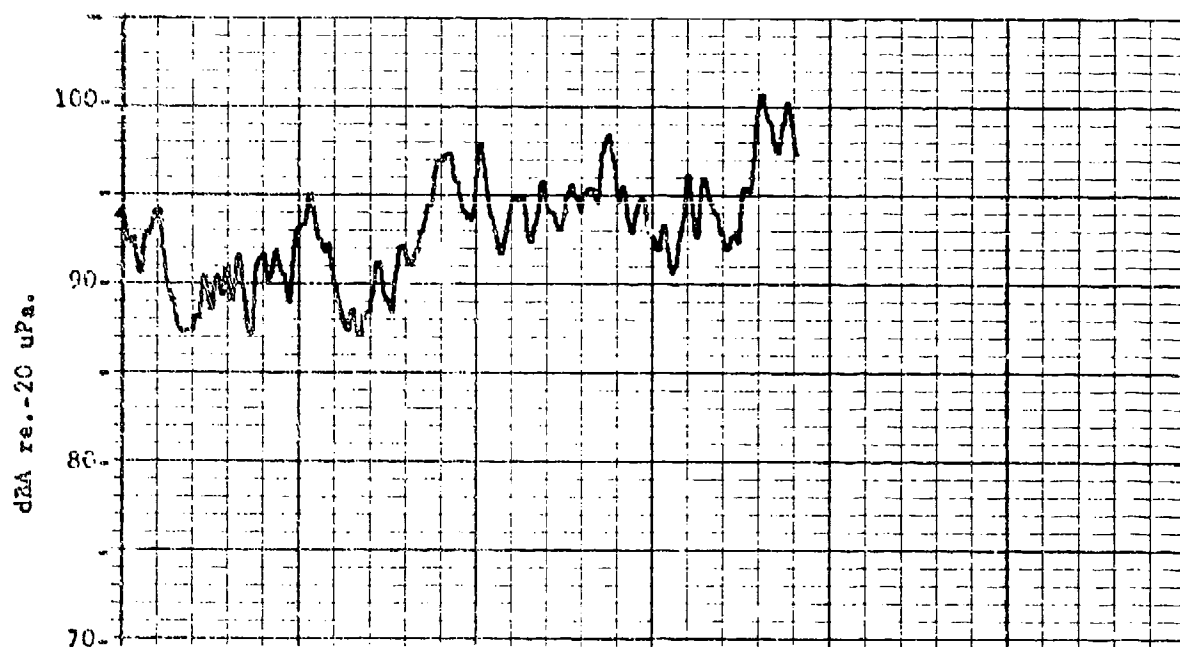
HELICOPTER OPERATION	RUN NUMBER	MICROPHONE OFFSET TO THE WEST 150M CENTER LINE		MICROPHONE OFFSET TO THE EAST 150M CENTER LINE	
3° GLIDE SLOPE	29	82.3	86.8	86.3	80.3
	30	81.8	85.5	83.0	82.3
	31	82.5	87.0	84.0	80.5
6° GLIDE SLOPE	20	82.8	85.0	82.5	79.5
	21	85.0	86.3	84.0	79.5
9° GLIDE SLOPE	15	84.0	80.5	79.8	78.8
	16	84.5	80.3	80.0	80.3
	17	83.5	82.8	81.0	81.8
60 KT LEVEL FLYOVER	18	81.0	80.0	79.5	78.5
	19	83.0	82.5	82.0	80.0
100KT LEVEL FLYOVER	26	82.8	84.0	81.5	82.5
	27	82.3	83.5	80.5	81.3
	28	81.8	81.8	79.5	80.5
115 KT LEVEL FLYOVER	32	84.0	85.3	82.0	82.3
	33	81.5	82.0	78.8	81.8
	34	81.8	84.0	81.8	85.3

TABLE F-IX

10 SEC



150 METERS WEST OF CENTER LINE



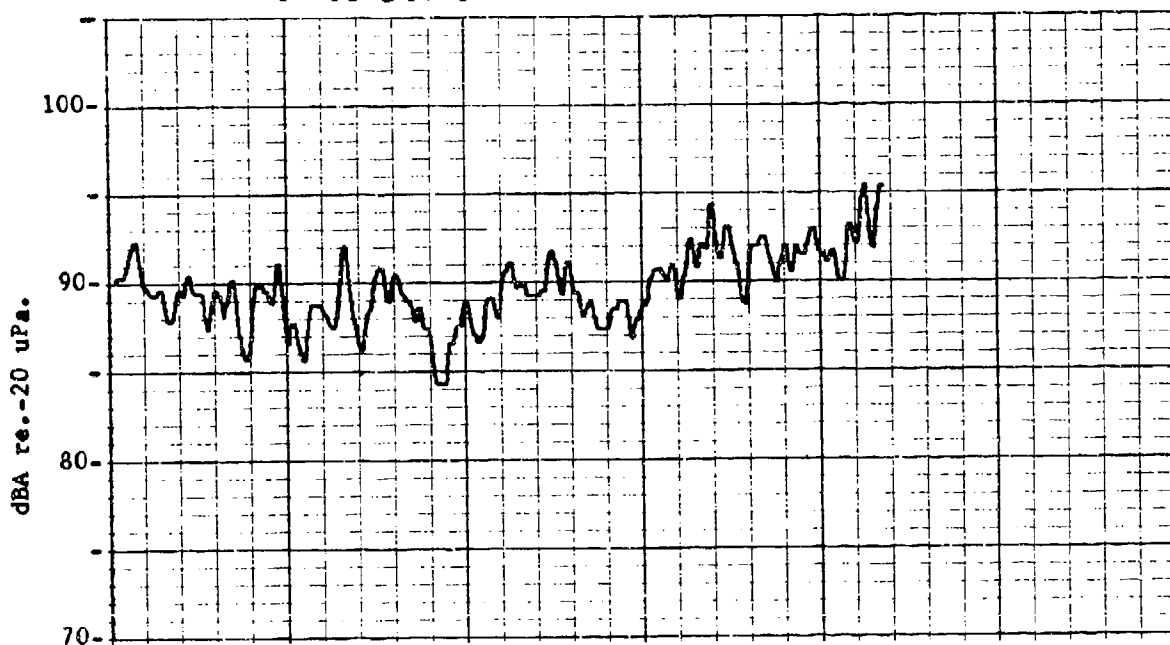
75 METERS WEST OF CENTER LINE

NOISE LEVEL TIME HISTORIES  
SIKORSKY S-61 HELICOPTER  
90° HOVER - 5 FT.

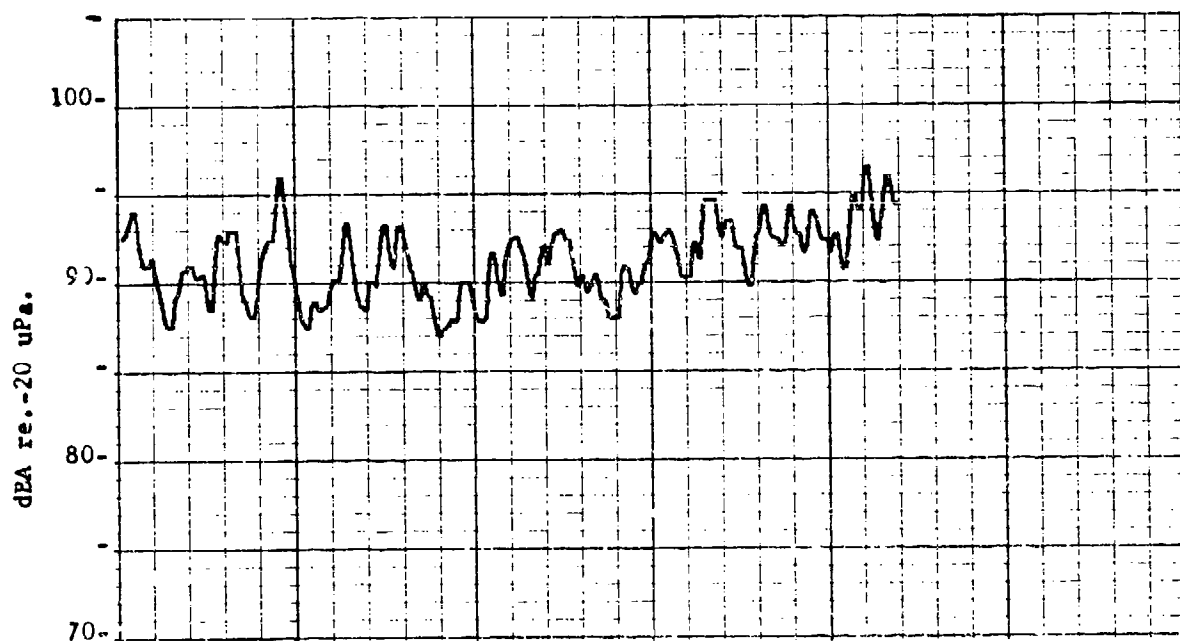
RUN 4

TABLE F-IV

← 10 SEC →



150 METERS WEST OF CENTER LINE



75 METERS WEST OF CENTER LINE

NOISE LEVEL TIME HISTORIES  
SIKORSKY S-61 HELICOPTER  
180° HOVER 5 FT

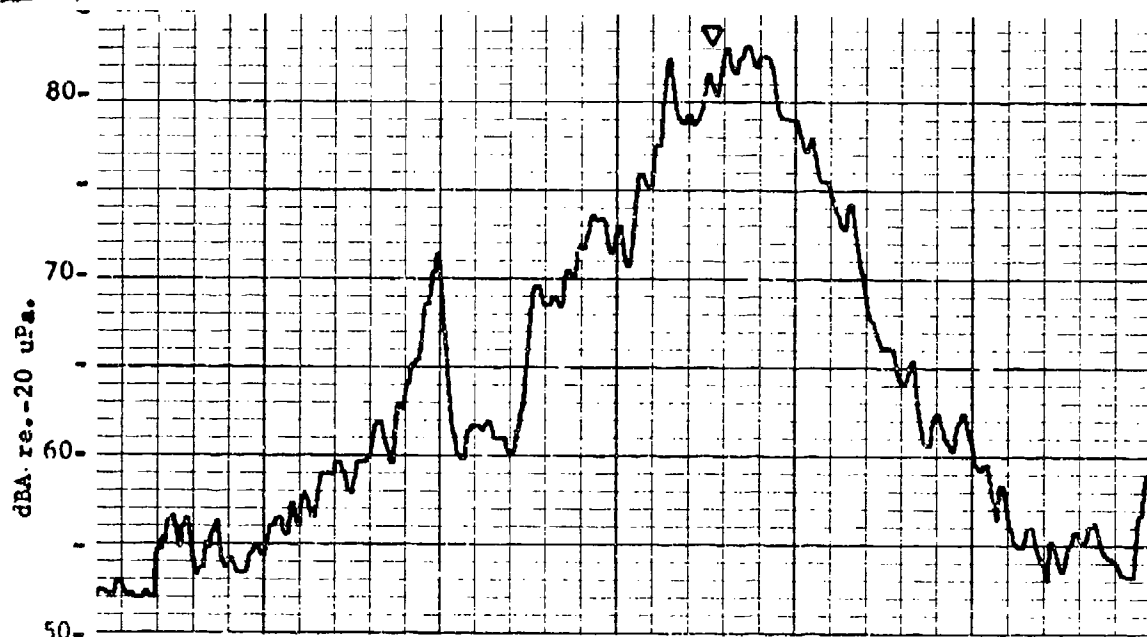
RUN 6



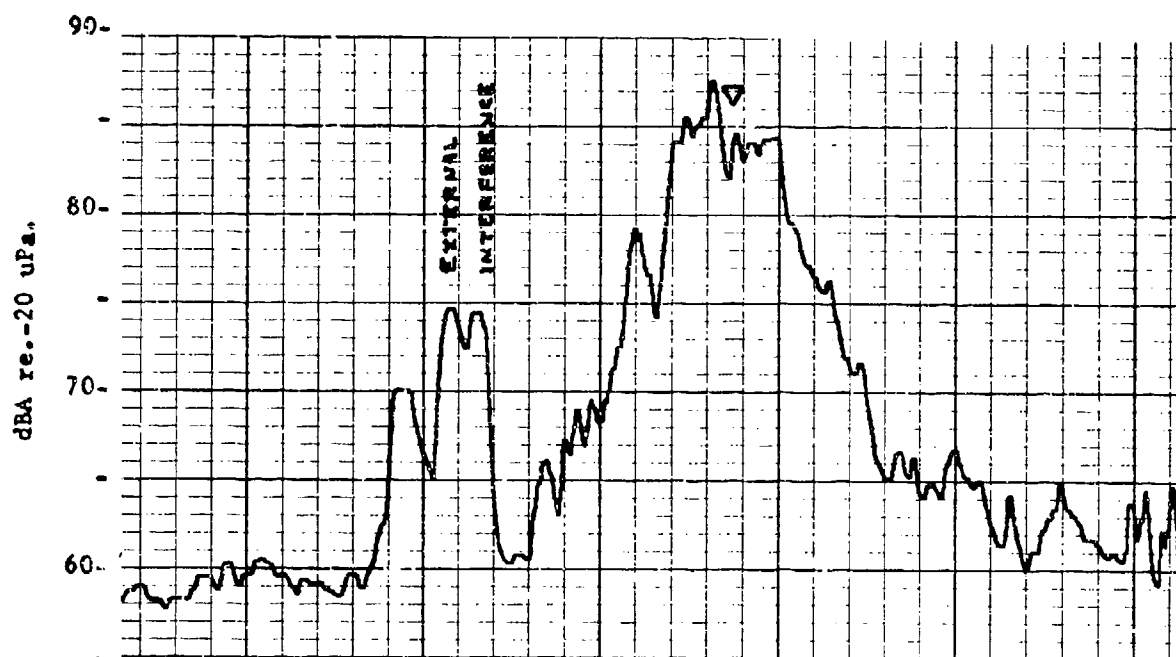
TABLE F-IX

10 SEC

▽ = CENTER CROSSING



150 METERS WEST OF FLIGHT PATH



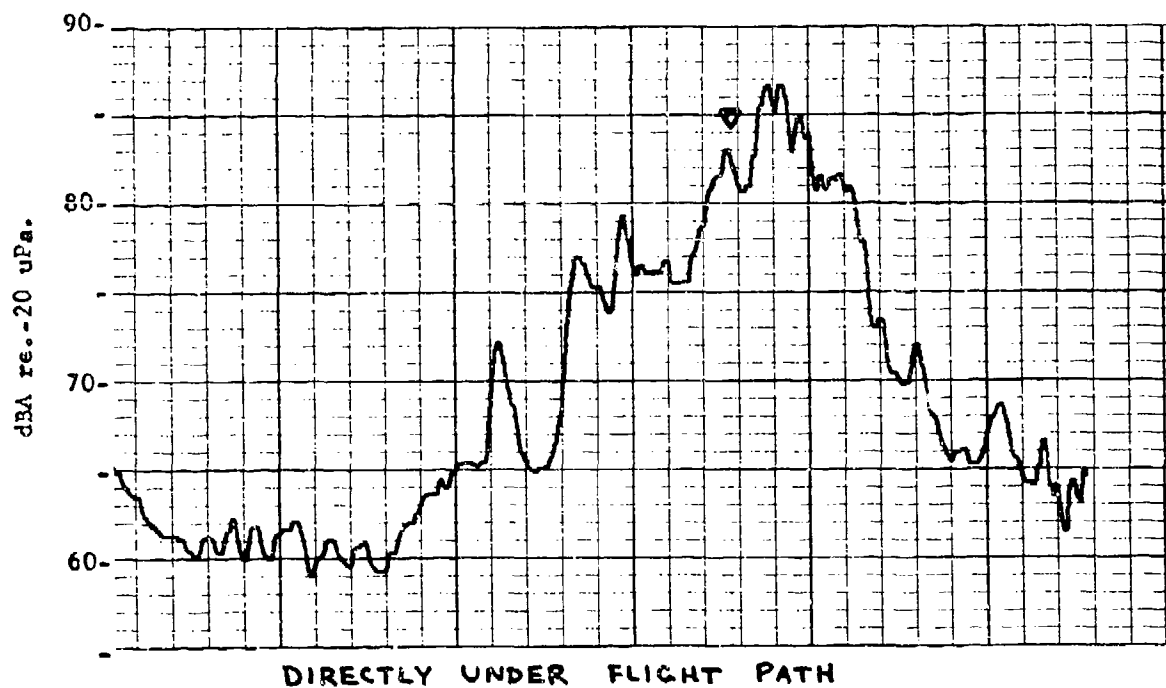
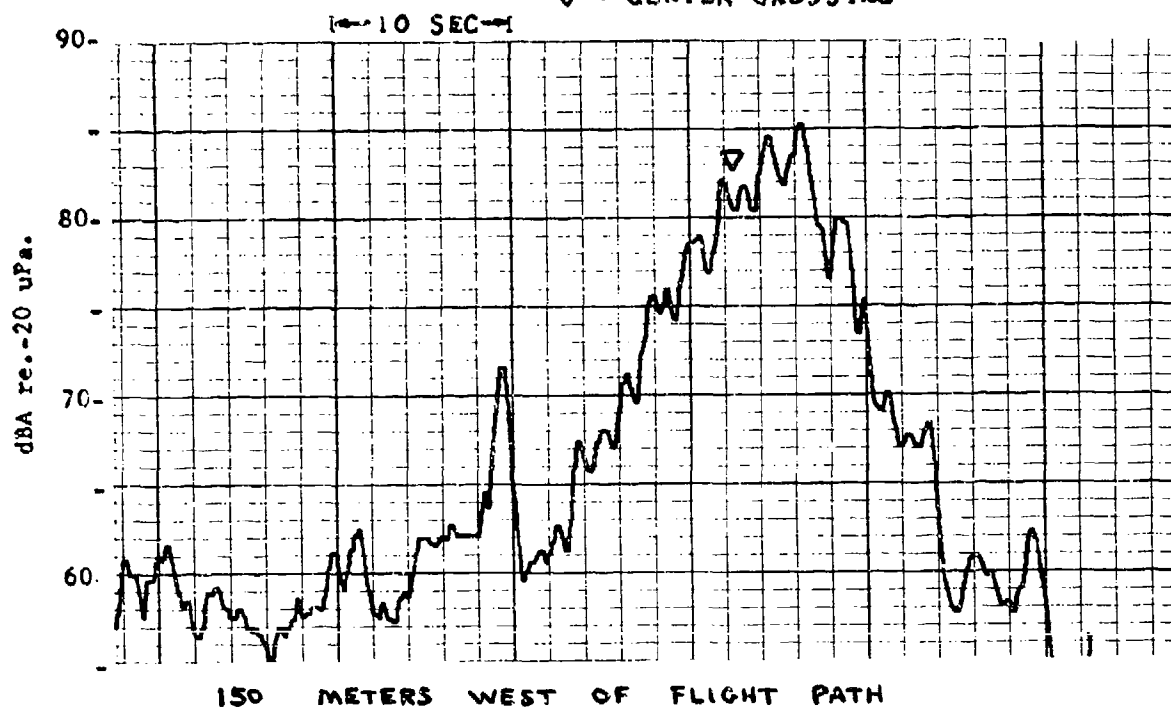
DIRECTLY UNDER FLIGHT PATH

NOISE LEVEL TIME HISTORIES  
SIKORSKY S-61 HELICOPTER  
3° APPROACH

RUN 31

TABLE F-IX

▽ = CENTER CROSSING

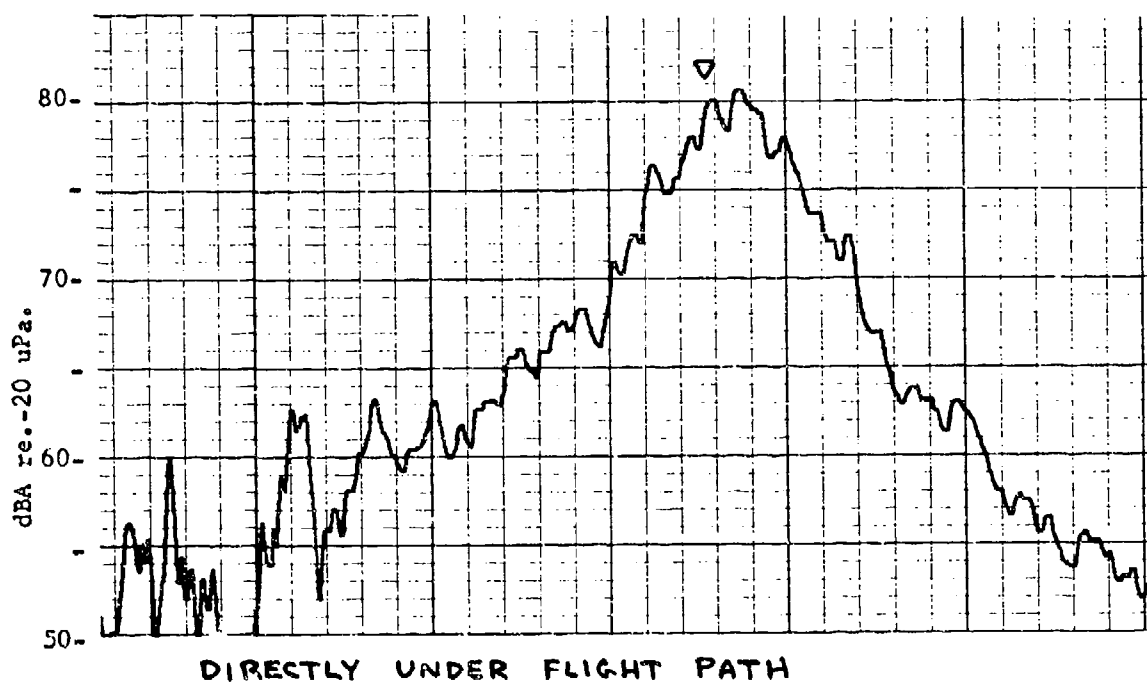
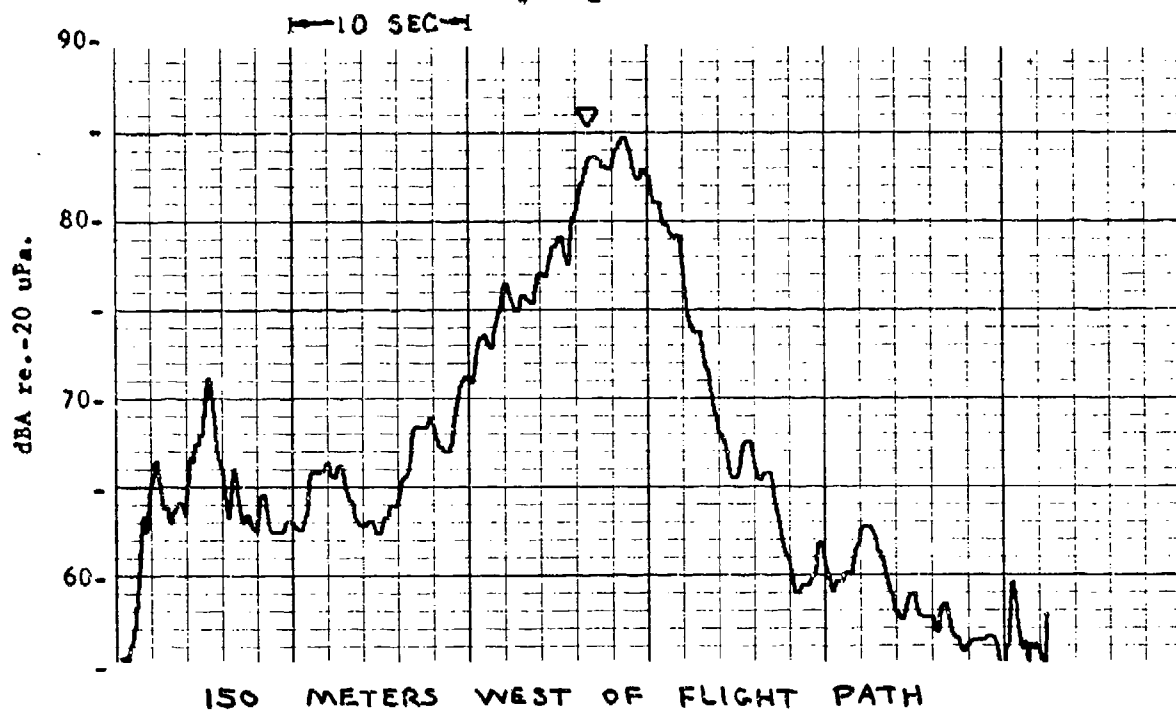


NOISE LEVEL TIME HISTORIES  
SIKORSKY S-61 HELICOPTER  
6° APPROACH

RUN 21

TABLE F-IX

▽ = CENTER CROSSING



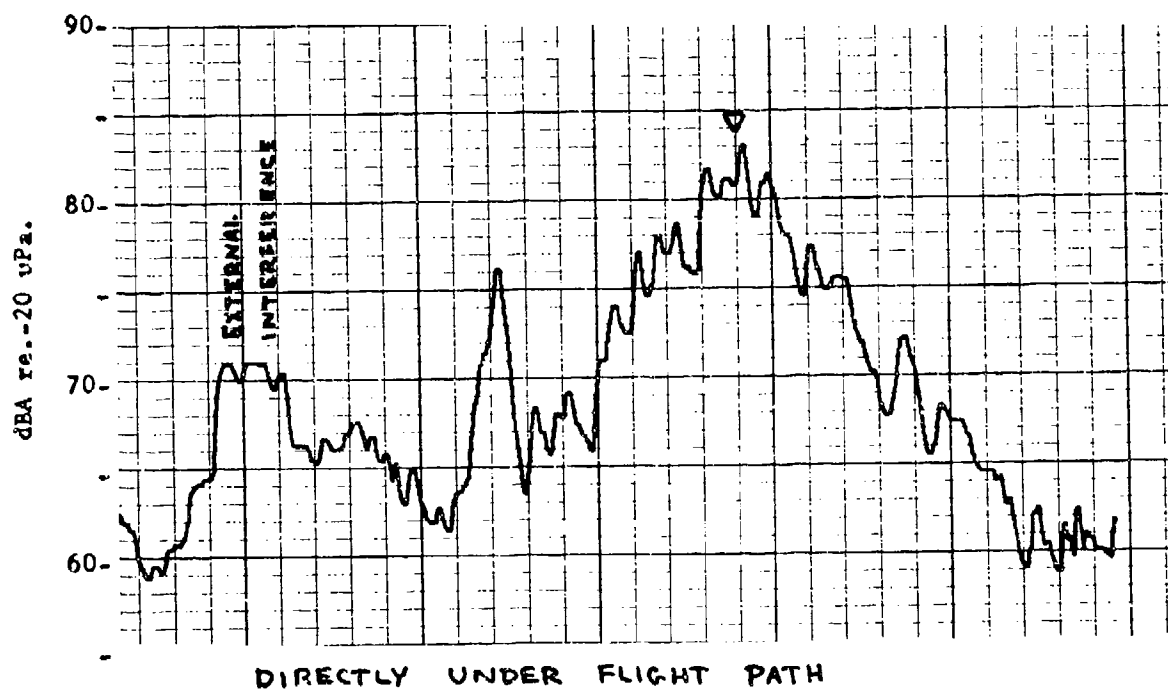
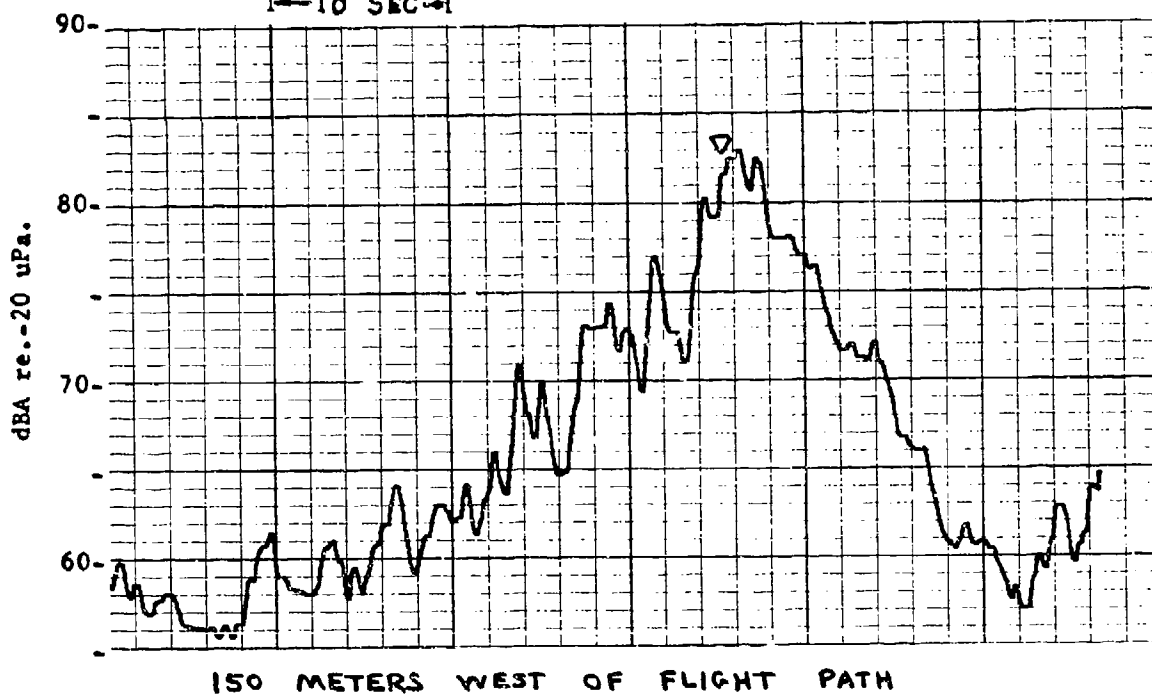
NOISE LEVEL TIME HISTORIES  
SIKORSKY S-61 HELICOPTER  
9° APPROACH

RUN 15

TABLE F-IX

▽ = CENTER CROSSING

1-10 SEC



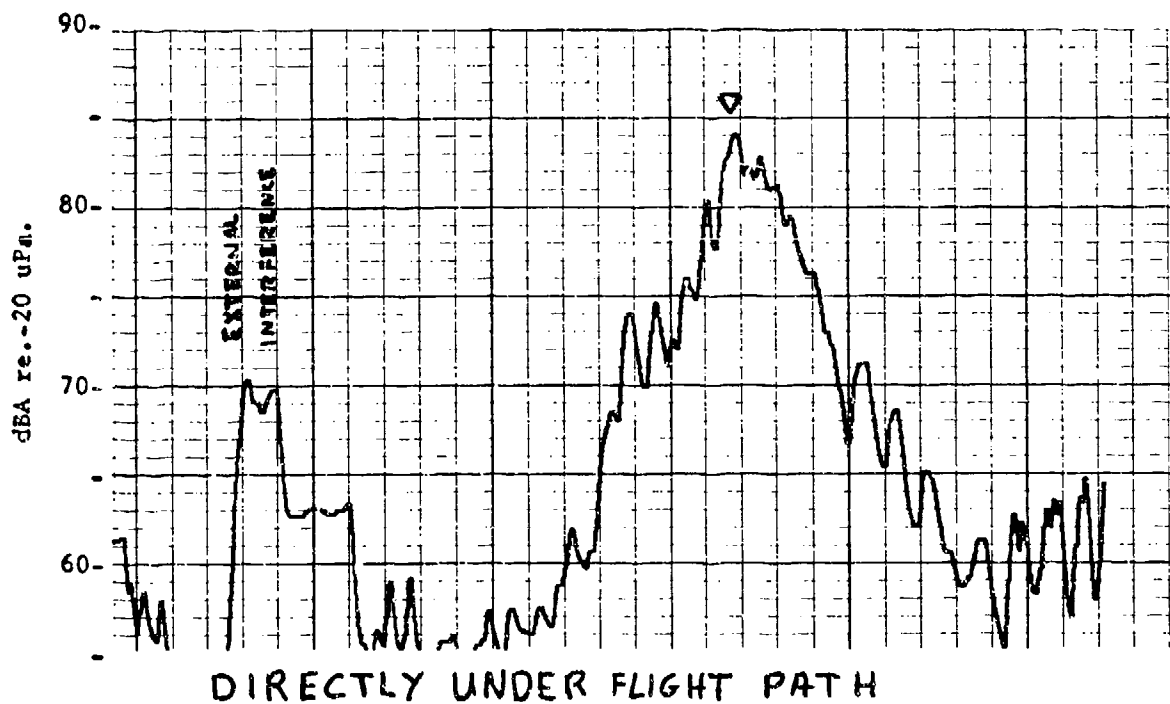
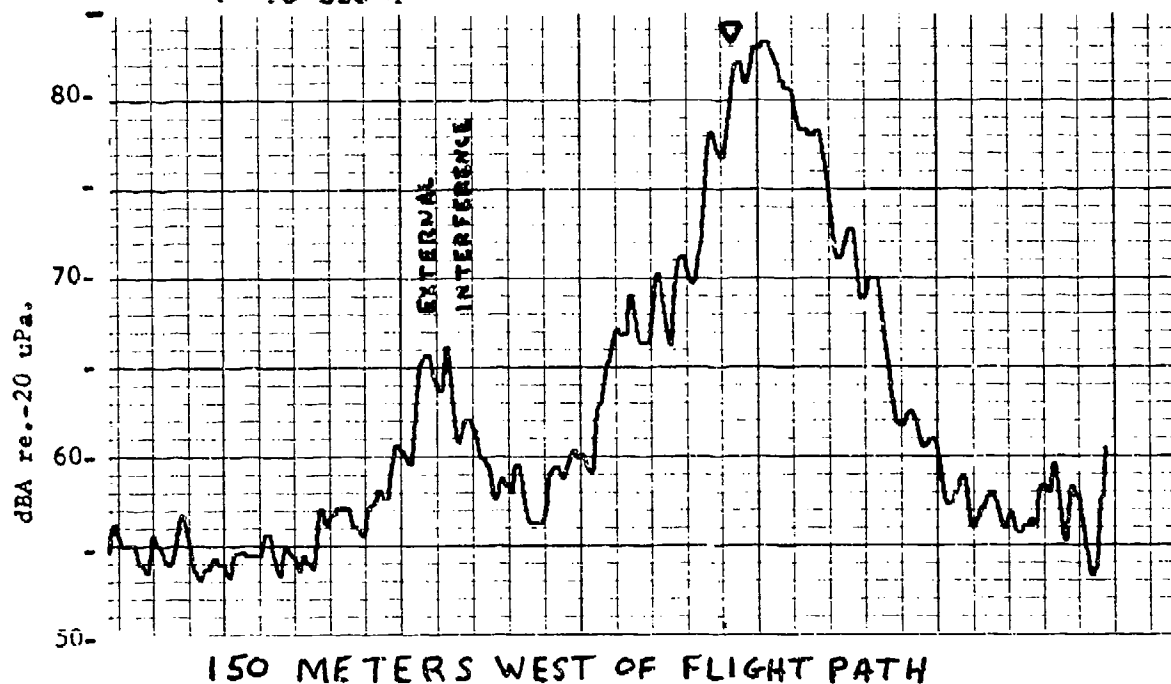
NOISE LEVEL TIME HISTORIES  
SIKORSKY S-61 HELICOPTER  
LEVEL FLYOVER - 60 KTS

RUN 19

TABLE F-IX

← 10 SEC →

▽ = CENTER CROSSING



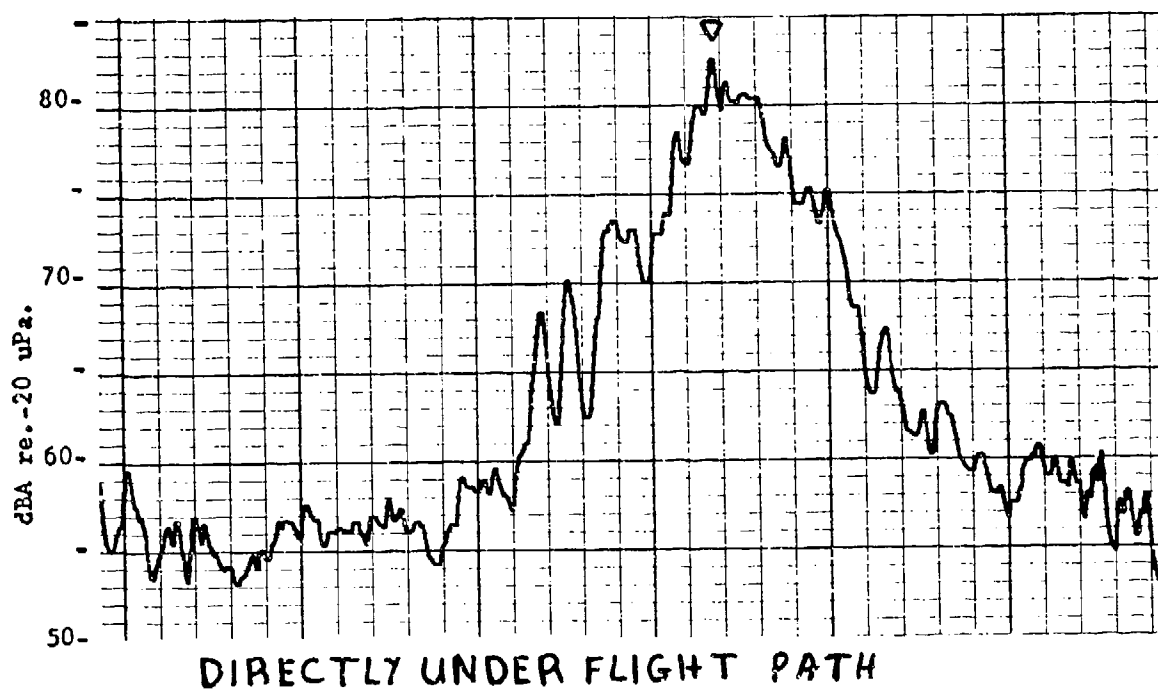
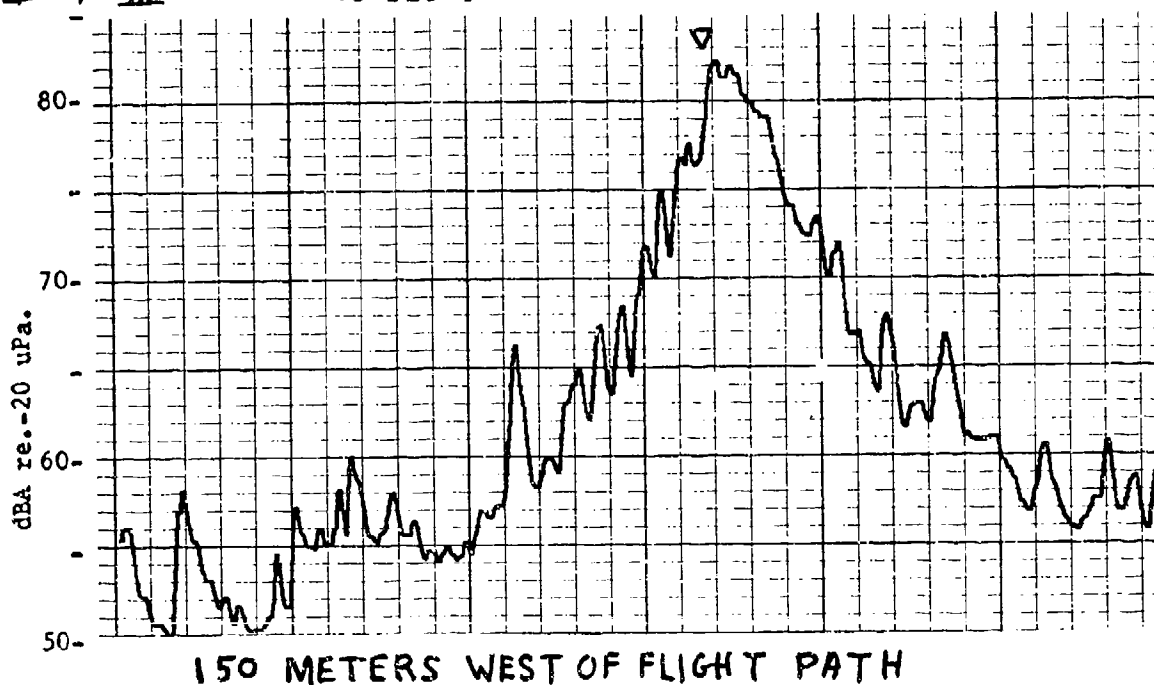
NOISE LEVEL TIME HISTORIES  
SIKORSKY S-61 HELICOPTER  
LEVEL FLYOVER - 100 KTS.

RUN 27

TABLE F-IX

10 SEC

▽ = CENTER CROSSING



NOISE LEVEL TIME HISTORIES  
SIKORSKY S-61 HELICOPTER  
LEVEL FLYOVER - 115 KTS

RUN 33

# DATA TABLE G

## Sikorsky S-64 "Skycrane" (CH-54B)

TEST DATE: 10-28-76

TEST SITE: NASA LANGLEY

SECTION - G	CONTENT	PAGE #
I	RUN LIST	555
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III	METEOROLOGICAL DATA	561
IV	LEVEL FLYOVER AND APPROACH NOISE DATA	562
V	TIME HISTORIES	564
VI	1/3-OCTAVE BAND SPECTRA--FLYOVER AND APPROACH	598
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VIII	MAXIMUM dBA NOISE LEVEL (ALL RUNS)	668
IX	SELECTED dBA TIME HISTORIES--GRAPHIC PLOTS	672

THE NOISE LEVELS PRESENTED IN SECTIONS IV, V AND VI HAVE BEEN TABULATED FOR THE SELECTED RUNS AND MICROPHONE LOCATIONS INDICATED ON THE FOLLOWING PAGE.

TABLE G-1

## LIST OF RUNS SELECTED FOR ANALYSIS

RUN#	TEST CONDITION	MICROPHONE LOCATION			
		WEST		EAST	
		150 m SIDELINE	CENTER LINE	CENTER LINE	150m SIDELINE
	<u>Heavy (with Truck)</u>				
43	9° Approach 60 Kts	X	X		X
49	Level Flyover 60 Kts		X		
50	↓		X		
51	6° Approach 60 Kts	X	X		X
55	Level Flyover 85 Kts		X		
66	↓		X		
67	95 Kts	X	X	X	X
68	↓	X	X	X	X
69	↓	X	X	X	X
70	3° Approach 60 Kts		X		
	<u>Light (without Truck)</u>				
74	6° Approach 60 Kts		X		
76	Level Flyover 85 Kts		X		
77	↓		X		
78	95 Kts		X		
79	↓		X		
80	105 Kts	X	X		X
81	↓	X	X		X
	Microphone Locations	Over Concrete	Over Concrete	Over Grass	Over Concrete



#### GENERAL COMMENTS

- o There were no problems encountered while testing the Sikorsky S-64 "Skycrane" (CH-54B).
- o The weather conditions during the test were very windy with gusts in the 10-15 mph range.
- o The S-64 "Skycrane" used a 13,500 lb. army truck for ballast. Because the truck could easily be detached from the helicopter, noise data was taken both with and without the truck.
- o Because the S-64 "Skycrane's" gross weight during testing was greatly effected by its rate of fuel consumption, a table has been inserted which provides a log of the gross weight as a function of time.

Subsonic S-64 "Skyraider"  
 Identifier Model: Military Designation CH-53B

Test Date: Oct. 28, 1976

Registered  
109999  
2121

Run	Time	Target Conditions		Aircraft Conditions					Engine Conditions			Ground Weather		Comments
		Type	Velocity	Altitude	Heading	Air Speed	50% of Max Torque	50% of Max RPM	Temp	RH	Wind Speed	Wind Direction		
1-34	Starbuck S-64 (SH 2)													
35	11:32	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	0° N	0	0	50%	35%	40°F	0%	N	off plane	
36	11:35	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
37	11:36	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
38	11:38	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
39	11:40	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
40	11:42	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
41	11:43	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
42	11:45	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
43	11:50	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
44	12:04	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
45	12:07	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
46	12:08	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
47	12:09	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
48	12:10	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
49	12:14	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
50	12:15	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
51	12:31	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
52	12:35	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
53	12:35	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
54	12:35	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
55	12:34	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
56	12:38	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
57	12:38	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
58	12:38	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
59	12:38	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
60	12:38	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
61	12:38	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
62	12:38	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
63	12:38	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
64	12:38	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	
65	12:38	Starbuck S-64 "Skyrone" tested with Army Tank	0	550	15° E	0	0	50%	35%	40°F	0%	N	off plane	

COPY

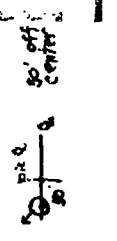
TABLE G-II Ground and Flight Log Data

Helicopter Model: Sikorsky S-64 "Skycrane" Military Designation CH-54B

Registration Number:

Test Date: Oct. 28, 1976

Run	Time	Target Conditions			dB A	Heading	Air Speed	Actual Conditions		Ground Weather				Comments			
		Type	Velocity	Altitude over Miss				Rate of Descent	Mp or Torque	Altitude over Miss	PPM	OAT	Temp		RH	Wind Speed	Wind Direction
67	2:23	Level Flight	95 Kts	500 ft	87.0	S	95 ft	0	40%	500 ft	100%	40°C	47°F	43%	7-15 Kts Avg. Gusts to 40 Kts	N	
68	2:35	↓	↓	↓	87.0	↓	↓	↓	↓	↓	↓	5°C	↓	↓	↓	↓	
69	2:40	↓	↓	↓	87.5	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
70	2:45	3° App.	60 Kts	400 ft	88.0	S	60 Kts	30 %	33%	400 ft	100%	40°C	↓	↓	↓	↓	good run
71	2:48	↓	↓	↓	88.3	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	good run
Sikorsky S-64 "Skycrane" without Army truck																	
72	3:00	Hover	0	500 ft	87.0	0° N	0	0	36%	500 ft	100%	50°C	48°F	38%	10-12 Kts Avg. Gusts to 18 Kts	N	2 off Hoyer Location
73	3:01	↓	↓	↓	93.5	90° E	↓	↓	30	↓	↓	↓	↓	↓	↓	↓	
74	3:04	6° App.	60 Kts	400 ft	86.7	S	60 Kts	40 %	15%	400 ft	100%	40°C	↓	↓	↓	↓	good run
75	3:07	↓	↓	↓	86.5	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	good run
76	3:10	Level Flight	95 Kts	500 ft	87.5	S	95 Kts	0	24	500 ft	100%	60°C	↓	↓	↓	↓	
77	3:14	↓	↓	↓	87.5	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
78	3:16	Level Flight	95 Kts	500 ft	88.5	S	95 Kts	↓	30	↓	↓	↓	↓	↓	↓	↓	
79	3:17	↓	↓	↓	89.5	↓	↓	↓	31	↓	↓	↓	↓	↓	↓	↓	
80	3:23	Level Flight	105 Kts	500 ft	89.0	S	105 Kts	↓	35	↓	↓	↓	↓	↓	↓	↓	
81	3:25	↓	↓	↓	89.6	↓	↓	↓	34	↓	↓	↓	↓	↓	↓	↓	
Hughes 500 C																	
86	4:03	Hover	0	5 ft	—	0° N	0	0	37	5 ft	100%	80°C	↓	↓	↓	↓	Abort
87	4:04	↓	↓	↓	—	45°	↓	↓	37	↓	↓	↓	↓	↓	↓	↓	
88	4:05	↓	↓	↓	—	90° F	↓	↓	38	↓	↓	↓	↓	↓	↓	↓	
89	4:06	↓	↓	↓	—	135°	↓	↓	39	↓	↓	↓	↓	↓	↓	↓	
90	4:07	↓	↓	↓	—	180° S	↓	↓	30	↓	↓	↓	↓	↓	↓	↓	
91	4:08	↓	↓	↓	—	225°	↓	↓	29	↓	↓	↓	↓	↓	↓	↓	
92	4:09	↓	↓	↓	—	270°	↓	↓	29	↓	↓	↓	↓	↓	↓	↓	
93	4:10	↓	↓	↓	—	315°	↓	↓	29	↓	↓	↓	↓	↓	↓	↓	



Abort

COPY

TABLE G-II

SIKORSKY S-64 "SKYCRANE" (CH-54B)

LOG OF GROSS WEIGHT vs. TIME

<u>Time</u>	<u>Run#</u>	<u>Army Truck</u>	<u>Fuel (lbs.)</u>	<u>Total Gross Weight</u>
11:33	35	13,500	6600	42,895
12:00	44	13,500	5000	41,295
12:20	51	13,500	3500	39,795
12:36	52	13,500	2600	38,895
----- REFUEL -----				
2:30	66	13,500	4900	41,195
2:50	71	13,500	3400	39,695
----- REMOVED ARMY TRUCK -----				
3:06	75	-	2800	25,595
3:20	80	-	2100	24,895
4:05	88	-	1400	24,195
4:13	93	-	1000	23,795

TABLE G-III

Meteorological Data  
Langley Air Force Base

October 28, 1976

TIME (hours)	TEMP. (of)	BAR. PRESS. (inches)	REL. HUM. (%)	WIND SPEED (mph)	WIND DIRECTION (degrees)	REMARKS
0800	53	778	62	5-19	0	Sky - Partly Cloudy
0815	53		66	10-19	20	
0930	53		67	16-23	25	
0845	53		68	14-22	20	
0900	54		69	9-19	30	
0915	54		70	11-19	30	
0930	54		69	13-22	25	
0945	54		69	8-20	20	
1000	54		69	7-16	30	
1015	54		68	12-18	30	
1030	55		67	18-23	40	Sky - Clear
1130	54		65	14-18	10	
1145	56		64	17-16	30	
1200	56		64	8-12	35	
1215	55		63	8-14	20	
1230	56		60	8-12	20	
1245	56		58	13-18	25	
1300	57	774	56	8-15	40	
1315	58		53	8-16	40	
1330	57		52	5-12	50	Sky - Clear
1345	57		50	8-13	40	
1400	57		40	5-12	45	
1415	57		48	5-12	15	
1430	57		47	5-12	50	
1445	58		48	5-9	30	
1500	57	772	47	5-8	20	
1515	57		47	6-10	25	
1530	57		47	5-13	60	
1545	58		48	8-11	20	
1600	58		47	8-10	50	
1615	57		46	9-11	60	
1630	56		46	5-6	40	
1645	57		46	5-6	40	
1700	57		47	1-5	25	
1715	56		48	2-7	40	

TABLE G-IV

## HELICOPTER APPROACH AND FLYOVER NOISE DATA

SIKORSKY S-64

OCTOBER 28 1976

MICROPHONE OFFSET 150 METERS WEST  
(10 RE 20 MICRO PA)

EVENT	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	LEQ	DUR(A)	DUR(P)	TC
43	100.0	86.5	91.9	95.4	99.8	102.3	83.1	16.0	15.0	2.5
51	98.0	85.7	91.1	94.7	98.8	100.6	82.9	13.5	13.5	1.8
67	96.0	87.8	92.0	94.8	99.2	99.2	84.8	10.5	11.5	.0
68	96.0	85.7	89.7	94.8	97.2	97.3	82.9	13.5	14.5	1.1
69	95.7	87.0	91.4	93.9	98.4	98.4	84.0	9.5	12.0	.0
80	95.3	86.8	90.6	93.3	98.2	98.2	83.7	9.0	11.5	.0
81	95.9	87.7	91.4	93.2	98.6	93.6	83.9	9.5	13.0	.0

MICROPHONE OFFSET 150 METERS EAST

EVENT	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	LEQ	DUR(A)	DUR(P)	TC
43	97.0	83.6	87.7	92.2	95.3	97.5	78.7	26.5	27.0	2.4
51	96.6	82.7	86.9	91.7	94.5	94.7	77.9	31.0	33.5	1.1
67	96.2	86.7	90.6	94.6	98.0	98.0	83.2	12.5	14.0	.0
68	95.5	84.6	88.9	95.4	96.3	97.5	82.3	12.5	13.0	1.4
69	95.8	86.6	90.2	94.3	97.9	96.4	83.3	11.5	13.0	.5
80	94.0	83.9	88.0	95.5	95.6	95.6	81.0	11.0	14.0	.0
81	93.2	82.8	87.2	94.1	94.6	94.6	79.7	12.0	15.0	.0

TABLE G-IV

HELICOPTER APPROACH AND FLYOVER NOISE DATA

SIKORSKY S-64

OCTOBER 28 1976

CENTERLINE MICROPHONE - HARD SITE  
(DB RE 20 MICRO PA)

EVENT	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	LEQ	DUR(A)	DUR(P)	TC
43	101.4	88.3	95.3	100.4	102.5	102.6	84.9	15.0	14.0	1.7
49	95.8	84.5	89.4	94.3	96.7	96.7	80.9	16.0	21.0	.0
50	96.8	84.2	90.3	95.1	97.9	97.9	81.1	17.5	22.0	.0
51	99.4	87.0	93.5	98.5	101.1	102.3	83.5	15.5	13.5	1.4
55	94.9	84.4	89.3	96.2	96.7	96.7	80.8	13.0	18.0	.0
66	95.6	85.3	90.2	97.5	98.1	98.1	81.8	11.0	16.0	.0
67	96.7	86.8	91.7	98.4	99.2	99.2	83.2	11.0	16.5	.0
68	96.1	86.7	90.8	99.1	98.4	98.4	82.9	11.0	15.5	.0
69	95.3	86.6	91.8	97.5	98.9	98.9	83.6	8.5	10.0	.0
70	99.5	88.2	93.9	99.5	101.4	101.4	84.0	16.0	16.5	.0
74	100.0	86.0	92.5	99.0	100.1	101.3	82.8	18.5	18.0	2.3
76	98.2	87.3	92.3	99.4	100.2	100.8	84.9	10.0	10.0	1.0
77	97.1	87.3	92.3	97.5	100.1	100.5	84.2	10.5	11.0	.6
78	98.1	88.2	93.9	100.0	101.7	102.9	85.3	9.0	7.5	1.2
79	98.1	89.3	94.4	99.4	102.3	103.2	85.8	8.0	8.0	1.0
80	97.7	88.5	94.2	100.2	102.3	103.1	84.8	8.0	8.0	.8
81	98.0	89.6	94.7	100.6	102.7	103.4	85.8	8.0	7.0	.7

CENTERLINE MICROPHONE - SOFT SITE

EVENT	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	LEQ	DUR(A)	DUR(P)	TC
67	95.5	86.3	90.9	97.3	98.9	98.9	82.5	10.5	12.0	.0
68	95.2	85.3	89.8	97.7	97.6	97.6	81.7	11.0	14.0	.0
69	95.0	86.2	90.7	96.7	98.5	98.5	83.0	7.5	13.5	.0

# TABLE G-IV

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 43 9 DEGREE APPROACH MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	69.7	77.6	86.6	86.1	87.4	16.4	7.9
2	73.1	79.6	87.3	88.1	89.9	15.0	6.5
3	75.6	81.6	88.3	89.5	91.1	13.9	6.0
4	76.7	82.4	89.2	90.3	91.8	13.6	5.7
5	77.5	83.2	89.9	91.0	92.3	13.5	5.7
6	77.9	83.6	90.1	91.4	92.6	13.5	5.7
7	78.0	83.8	90.3	91.4	91.4	13.4	5.8
8	78.7	84.2	90.6	92.1	92.1	13.4	5.5
9	79.7	85.1	91.1	92.8	92.8	13.1	5.4
10	79.9	85.3	91.3	93.1	94.2	13.2	5.4
11	79.4	84.8	91.2	92.7	94.1	13.3	5.4
12	79.6	85.2	91.4	93.0	94.5	13.4	5.6
13	80.3	86.3	91.7	93.9	95.2	13.1	5.5
14	81.8	87.4	92.2	95.0	95.0	13.2	5.6
15	82.1	87.9	92.5	95.6	95.6	13.5	5.8
16	82.7	88.8	93.0	96.2	96.2	13.5	6.1
17	83.2	89.3	93.5	96.9	98.2	13.7	6.1
18	84.3	90.2	93.9	97.6	100.1	13.5	5.9
19	84.8	90.3	93.8	98.1	100.8	13.3	5.5
20	85.7	90.9	93.8	98.8	101.5	13.1	5.2
21	86.3	91.6	94.5	99.5	102.1	13.2	5.3
22	86.6	91.9	95.0	99.8	102.3	13.2	5.3
23	86.2	91.5	95.1	99.5	101.7	13.3	5.3
OH→24	85.7	91.1	95.3	99.2	101.4	13.5	5.4
25	85.5	90.8	95.2	98.8	100.8	13.3	5.3
26	85.6	91.0	95.4	99.0	100.7	13.4	5.4
27	85.7	91.0	95.4	98.9	100.2	13.2	5.3
28	85.4	90.6	95.3	98.7	98.7	13.3	5.2
29	84.5	89.5	94.5	97.6	97.6	13.1	5.0
30	83.1	88.0	93.4	96.0	96.0	12.9	4.9
31	81.6	86.6	92.5	94.5	94.5	12.9	5.0
32	80.5	85.5	91.4	93.6	93.6	13.1	5.0
33	79.7	84.3	90.6	93.2	93.2	13.5	5.1
34	78.7	83.7	89.4	91.9	93.1	13.2	5.0
35	77.1	82.4	88.2	90.3	90.3	13.2	5.3
36	74.2	80.0	87.1	88.0	89.2	13.8	5.8
37	71.9	78.3	86.1	86.3	87.9	14.4	6.4
38	70.4	77.5	86.7	85.4	86.5	15.0	7.1



TABLE G-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

*With truck*

OCTOBER 28 1976

EVENT 51 6 DEGREE APPROACH MIC.150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DED-DBA
1	72.3	78.7	86.2	87.4	87.4	15.1	6.4
2	72.7	79.1	86.7	87.7	88.9	15.0	6.4
3	73.6	79.6	86.9	88.2	89.4	14.6	6.0
4	75.0	80.9	87.2	89.4	90.9	14.4	5.9
5	77.2	82.4	87.4	90.9	90.9	13.7	5.2
6	79.6	84.9	88.6	92.7	92.7	13.1	5.3
7	81.6	87.1	90.1	94.3	95.4	12.7	5.5
8	82.2	87.8	90.8	94.9	96.3	12.7	5.6
9	82.1	87.8	91.4	94.9	96.4	12.8	5.7
10	81.3	86.9	91.0	94.4	94.4	13.1	5.6
11	81.1	86.7	90.9	94.2	94.2	13.1	5.6
12	81.5	86.9	90.8	94.5	94.5	13.0	5.4
13	82.9	88.1	91.7	95.7	95.7	12.8	5.2
14	84.2	89.5	92.8	97.2	98.8	13.0	5.3
15	85.3	90.7	93.6	98.3	100.4	13.0	5.4
16	85.7	91.1	93.9	98.8	100.6	13.1	5.4
17	85.7	91.0	94.0	98.6	100.1	12.9	5.3
18	85.0	90.3	94.0	97.9	99.2	12.9	5.3
CH → 19	84.5	89.8	94.2	97.6	99.2	13.1	5.3
20	84.5	89.4	94.4	97.4	99.0	12.9	4.9
21	85.0	89.6	94.5	97.0	98.3	12.0	4.6
22	85.2	89.7	94.7	96.9	96.9	11.7	4.5
23	84.6	89.3	94.6	96.6	96.6	12.0	4.7
24	83.9	88.7	94.3	96.1	96.1	12.2	4.8
25	82.9	87.6	93.4	95.1	95.1	12.2	4.7
26	82.2	86.8	92.3	94.4	94.4	12.2	4.6
27	80.6	85.3	91.0	93.1	93.1	12.5	4.7
28	79.0	83.8	89.6	91.7	91.7	12.7	4.8
29	76.3	82.0	88.5	90.1	90.1	13.3	5.2
30	75.4	80.8	87.8	88.9	90.1	13.5	5.4
31	74.0	79.8	87.1	88.0	89.1	14.0	5.8
32	73.8	79.4	86.6	87.6	87.6	13.8	5.6
33	73.0	78.9	85.9	87.0	88.2	14.0	5.9

# TABLE G-II

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

With Truck

OCTOBER 28 1976

EVENT 67 95 KT. FLY BY MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	69.9	78.8	88.7	86.7	86.7	16.8	8.9
2	73.1	79.6	88.9	87.6	87.6	14.5	6.5
3	75.4	81.0	89.2	88.8	88.8	13.4	5.6
4	76.6	81.9	89.6	89.9	89.9	13.3	5.3
5	79.1	83.9	90.4	91.6	93.1	12.5	4.8
6	81.3	85.8	91.5	93.7	95.0	12.4	4.5
7	83.0	86.9	92.0	94.9	96.1	11.9	3.9
8	84.0	87.9	92.5	95.9	97.2	11.9	3.9
9	85.2	89.0	92.7	97.1	97.1	11.9	3.8
10	86.2	90.1	92.9	97.9	97.9	11.7	3.9
11	86.5	90.3	92.4	97.7	97.7	11.2	3.8
12	86.2	89.7	91.8	97.1	97.1	10.9	3.5
13	86.4	90.2	92.2	97.2	97.2	10.8	3.8
14	87.2	91.1	93.1	98.3	98.3	11.1	3.9
OH → 15	87.8	91.9	94.0	99.1	99.1	11.3	4.1
16	87.7	92.0	94.5	99.2	99.2	11.5	4.3
17	87.4	91.7	94.8	98.9	98.9	11.5	4.3
18	86.6	90.8	94.7	98.1	98.1	11.5	4.2
19	85.1	89.2	94.0	96.6	96.6	11.5	4.1
20	83.0	87.4	92.7	94.8	94.8	11.8	4.4
21	81.5	85.9	91.3	93.4	93.4	11.9	4.4
22	80.5	84.7	90.0	92.3	92.3	11.8	4.2
23	79.0	83.1	88.7	91.0	91.0	12.0	4.1
24	76.9	81.6	87.6	89.5	89.5	12.6	4.7
25	75.1	80.4	86.5	88.4	89.4	13.3	5.3
26	74.6	79.9	85.8	87.9	87.9	13.3	5.3
27	73.6	79.2	84.8	87.4	87.4	13.8	5.6

# TABLE G-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

With Truck

OCTOBER 28 1976

EVENT 68 95 KT. FLY BY MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	71.6	78.9	88.3	86.8	86.8	15.2	7.3
2	72.5	79.5	88.9	87.3	87.3	14.8	7.0
3	73.1	80.0	89.6	87.7	88.9	14.6	6.9
4	75.0	81.4	90.9	88.8	88.8	13.8	6.4
5	78.7	83.5	91.6	91.3	93.3	12.6	4.8
6	80.2	84.9	92.3	92.4	94.3	12.2	4.7
7	81.0	85.7	92.4	93.2	94.7	12.2	4.7
8	82.5	86.9	93.2	95.0	95.0	12.5	4.4
9	83.9	88.0	94.1	96.3	97.3	12.4	4.1
10	85.0	89.1	94.8	97.2	97.2	12.2	4.1
11	84.9	89.0	94.5	97.0	97.0	12.1	4.1
12	84.5	88.8	93.4	96.3	96.3	11.8	4.3
13	84.5	88.4	92.2	95.8	95.8	11.3	3.9
14	85.1	89.1	91.9	96.2	96.2	11.1	4.0
15	85.7	89.7	92.1	96.9	96.9	11.2	4.0
OH → 16	85.6	89.6	92.3	96.9	96.9	11.3	4.0
17	85.3	89.3	92.6	96.5	96.5	11.2	4.0
18	84.5	88.7	93.0	96.1	96.1	11.6	4.2
19	84.1	88.3	93.3	96.0	96.0	11.9	4.2
20	83.4	87.8	93.3	95.4	95.4	12.0	4.4
21	82.7	87.0	92.8	94.6	94.6	11.9	4.3
22	81.6	85.9	91.7	93.2	93.2	11.6	4.3
23	80.3	84.3	90.4	92.2	92.2	11.9	4.0
24	79.4	83.5	89.1	91.3	91.3	11.9	4.1
25	78.2	82.8	88.1	90.6	90.6	12.4	4.6
26	76.9	82.0	87.1	89.7	89.7	12.8	5.1
27	76.6	81.8	86.3	89.3	89.3	12.7	5.2
28	75.5	80.7	85.2	88.4	89.7	12.9	5.2
29	74.1	79.6	84.2	87.4	88.5	13.3	5.5
30	71.8	77.9	83.2	86.2	86.2	14.4	6.1
31	71.3	77.6	82.7	85.8	86.9	14.5	6.3

*TABLE G-V*  
 NOISE LEVEL TIME HISTORY DATA  
 SIKORSKY S-64  
*With truck*

OCTOBER 28 1976

EVENT 69      95 KT. FLY BY   MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
 (DB RE 20 MICRO PA)

INT	DBA	DBD	GASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	72.1	79.0	89.2	87.1	87.1	15.0	6.9
2	74.6	80.5	89.9	88.5	89.5	13.9	5.9
3	76.5	81.7	90.0	89.6	91.3	13.1	5.2
4	78.3	83.1	90.2	90.9	92.4	12.6	4.8
5	79.9	84.1	90.0	92.1	92.1	12.2	4.2
6	81.0	85.3	90.6	93.6	94.6	12.6	4.3
7	82.3	86.3	91.0	94.4	94.4	12.1	4.0
8	83.1	87.6	91.6	95.3	95.3	12.2	4.5
9	84.2	88.5	91.8	95.8	95.8	11.6	4.3
10	85.9	90.0	92.4	97.1	97.1	11.2	4.1
11	87.1	90.9	93.0	97.7	97.7	10.6	3.8
12	87.6	91.4	93.3	98.4	98.4	10.8	3.8
ON → 13	87.1	91.2	93.3	98.4	98.4	11.3	4.1
14	86.4	90.8	93.5	98.0	98.0	11.6	4.4
15	85.5	90.1	93.9	97.3	97.3	11.8	4.6
16	84.5	89.2	93.8	96.4	96.4	11.9	4.7
17	83.3	87.9	93.3	95.3	95.3	12.0	4.6
18	82.1	86.7	92.2	94.2	94.2	12.1	4.6
19	81.2	85.7	90.9	93.3	93.3	12.1	4.5
20	80.1	84.6	89.6	92.4	92.4	12.3	4.5
21	79.0	83.3	88.3	91.0	91.0	12.0	4.3
22	77.6	82.0	87.0	89.7	89.7	12.1	4.4
23	76.3	81.0	85.9	88.9	90.2	12.6	4.7
24	75.3	80.4	85.2	88.2	89.7	12.9	5.1
25	74.3	79.5	84.4	87.5	87.5	13.2	5.3

# TABLE G-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

With Truck

OCTOBER 28 1976

EVENT 43 9 DEGREE APPROACH MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	66.7	75.5	83.4	84.3	84.3	17.6	8.8
3	68.8	76.5	83.9	85.2	85.2	16.4	7.7
5	70.4	77.1	84.4	85.9	85.9	15.5	6.7
7	73.5	78.7	84.7	87.4	87.4	13.9	5.2
9	74.3	79.3	85.8	88.0	88.0	13.7	5.0
11	73.4	78.6	86.2	87.4	87.4	14.0	5.2
13	72.4	78.4	86.5	86.9	86.9	14.5	6.0
15	73.7	79.2	86.9	87.7	87.7	14.0	5.5
17	75.0	80.1	87.6	88.6	88.6	13.6	5.1
19	72.4	78.6	87.8	87.0	88.2	14.6	6.2
21	70.8	78.1	88.2	86.4	87.9	15.6	7.3
23	71.4	78.5	88.8	86.8	88.1	15.4	7.1
25	71.6	78.8	89.5	87.0	87.0	15.4	7.2
27	73.9	79.8	89.6	87.6	87.6	13.7	5.9
29	75.9	81.2	90.2	89.2	90.2	13.3	5.3
31	77.2	82.3	91.1	90.0	91.1	12.8	5.1
33	79.8	84.1	92.1	91.9	93.2	12.1	4.3
35	82.7	86.7	92.0	94.3	96.5	11.6	4.0
37	83.2	87.4	91.9	94.8	97.1	11.6	4.2
39	80.9	85.8	90.3	93.2	94.7	12.3	4.9
OH → 41	82.7	87.1	90.0	94.7	95.8	12.0	4.4
43	82.9	87.4	90.8	95.3	95.3	12.4	4.5
45	82.9	87.4	90.9	95.0	96.0	12.1	4.5
47	81.7	86.5	90.8	94.4	94.4	12.7	4.8
49	80.3	86.0	90.8	93.8	95.3	13.5	5.7
51	79.9	85.6	90.3	94.0	94.0	14.1	5.7
53	78.0	83.7	89.1	92.1	92.1	14.1	5.7
55	73.8	80.3	87.4	89.2	89.2	15.4	6.5
57	74.0	80.7	87.7	89.7	91.4	15.7	6.7
59	74.0	80.5	87.0	89.3	91.5	15.3	6.5
61	69.6	77.6	84.6	86.3	86.3	16.7	8.0
63	66.8	75.6	83.0	84.0	84.0	17.2	8.8
65	65.0	74.5	81.7	83.2	83.2	18.2	9.5

# TABLE G-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

With Truck

OCTOBER 28 1976

EVENT 51 6 DEGREE APPROACH MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	64.6	75.2	82.9	84.3	84.3	19.7	10.6
3	66.6	75.6	83.1	84.6	84.6	18.0	9.0
5	70.7	77.0	83.8	85.5	85.5	14.8	6.3
7	73.0	78.9	85.5	87.5	88.8	14.5	5.9
9	72.2	79.4	87.4	87.6	87.6	15.4	7.2
11	71.0	79.2	87.7	88.0	88.0	17.0	8.2
13	71.2	79.2	87.1	88.0	88.0	16.8	8.0
15	70.8	78.5	87.0	87.3	88.6	16.5	7.7
17	71.3	79.2	88.7	89.0	90.3	17.7	7.9
19	71.4	78.7	87.7	87.7	87.7	16.3	7.3
21	73.1	78.8	87.2	87.4	87.4	14.3	5.7
23	73.9	79.5	88.3	87.8	87.8	13.9	5.6
25	74.5	80.0	89.2	88.2	88.2	13.7	5.5
27	74.7	80.4	89.9	89.1	90.6	14.4	5.7
29	74.6	80.0	89.4	89.0	91.0	14.4	5.4
31	75.7	81.1	90.4	89.4	89.4	13.7	5.4
33	78.1	82.7	91.3	90.7	91.8	12.6	4.6
35	80.5	84.3	91.5	92.1	93.6	11.6	3.8
37	80.9	85.2	91.5	92.7	92.7	11.8	4.3
39	81.6	85.9	91.6	93.3	94.4	11.7	4.3
41	82.0	86.3	91.0	94.0	94.0	12.0	4.3
OH → 43	82.7	86.9	90.5	94.4	94.4	11.7	4.2
45	82.7	86.8	90.8	94.5	94.5	11.8	4.1
47	81.8	86.2	90.7	94.2	94.2	12.4	4.4
49	80.6	85.4	90.1	93.5	93.5	12.9	4.8
51	79.7	85.0	90.0	93.6	94.7	13.9	5.3
53	80.0	85.3	89.3	93.3	93.3	13.3	5.3
55	77.0	82.5	88.0	90.9	92.0	13.9	5.5
57	75.2	81.3	87.3	89.9	89.9	14.7	6.1
59	73.6	80.3	86.8	88.8	90.5	15.2	6.7
61	72.2	79.5	85.9	88.4	89.6	16.2	7.3
63	70.8	79.1	85.9	87.7	87.7	16.9	8.3
65	74.9	81.8	87.8	90.2	91.3	15.3	6.9
67	75.9	82.4	87.5	90.6	92.1	14.7	6.5
69	69.1	77.2	83.1	85.5	85.5	16.4	8.1
71	64.6	74.7	80.7	83.4	83.4	18.8	10.1
73	63.1	73.7	79.5	82.8	82.8	19.7	10.6
75	60.7	72.6	77.7	.0	.0	-60.6	11.9

TABLE G-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

with truck

OCTOBER 28 1976

EVENT 67 95 KT. FLY BY MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	69.8	77.5	88.2	85.4	86.5	15.6	7.7
2	70.9	78.2	88.7	85.9	85.9	15.0	7.3
3	73.6	79.6	89.0	87.4	87.4	13.8	6.0
4	76.6	81.0	89.4	89.3	89.3	12.7	4.4
5	79.7	83.0	89.9	91.2	92.4	11.5	3.3
6	80.9	84.2	90.6	92.4	93.9	11.5	3.3
7	80.7	84.5	91.2	92.6	94.1	11.9	3.8
8	80.2	84.5	91.8	92.8	94.2	12.6	4.3
9	81.5	85.9	92.5	94.0	94.0	12.5	4.4
10	82.6	86.8	93.0	94.7	94.7	12.1	4.2
11	83.9	88.0	93.6	95.7	95.7	11.8	4.1
12	84.4	88.5	93.9	96.2	96.2	11.8	4.1
13	85.0	89.1	94.0	96.3	97.5	11.3	4.1
14	85.1	89.4	94.0	96.5	97.5	11.4	4.3
15	85.8	90.0	94.1	97.0	97.5	11.2	4.2
16	86.5	90.6	94.5	97.7	97.7	11.2	4.1
OH → 17	86.7	90.5	94.6	98.0	98.0	11.3	3.8
18	86.4	90.4	94.6	97.9	97.9	11.5	4.0
19	85.8	89.9	93.9	97.4	97.4	11.6	4.1
20	84.7	89.1	92.8	96.6	96.6	11.9	4.4
21	83.4	87.7	91.1	95.2	95.2	11.8	4.3
22	81.7	86.1	89.3	93.5	93.5	11.8	4.4
23	80.6	84.7	87.7	92.4	92.4	11.8	4.1
24	79.2	83.4	86.4	90.9	90.9	11.7	4.2
25	78.8	82.7	85.2	90.4	90.4	11.6	3.9
26	78.3	82.2	84.4	90.1	91.2	11.8	3.9
27	77.5	81.4	83.7	89.8	89.8	12.3	3.9
28	76.7	80.8	83.4	89.3	90.4	12.6	4.1
29	75.3	79.6	82.8	88.3	89.7	13.0	4.3
30	73.7	78.5	82.0	87.2	87.2	13.5	4.8
31	72.1	77.1	80.9	85.6	85.6	13.5	5.0

# TABLE G-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

*With truck*

OCTOBER 28 1976

EVENT 68 95 KT. FLY BY MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	66.8	77.4	88.6	84.3	84.3	18.0	10.6
2	68.8	78.1	89.1	85.8	85.8	17.0	9.3
3	72.0	79.3	89.7	87.5	87.5	15.5	7.3
4	74.9	80.5	90.5	89.0	89.0	14.1	5.6
5	78.9	83.5	91.8	91.7	92.8	12.8	4.6
6	82.1	86.2	93.0	94.2	94.2	12.1	4.1
7	83.0	87.3	93.8	95.2	95.2	12.2	4.3
8	82.8	87.4	94.2	95.4	95.4	12.6	4.6
9	82.7	88.0	94.7	95.7	95.7	13.0	5.3
10	83.2	88.5	95.2	96.0	96.0	12.8	5.3
11	83.7	88.8	95.4	96.1	97.5	12.4	5.1
12	83.3	88.0	95.2	95.5	96.8	12.2	4.7
13	82.8	87.4	95.1	94.4	94.4	11.6	4.6
14	83.2	87.7	95.1	94.6	94.6	11.4	4.5
15	84.1	87.9	95.0	95.5	95.5	11.4	3.8
16	84.4	88.2	94.8	95.7	95.7	11.3	3.8
ON → 17	84.2	88.4	94.4	95.5	95.5	11.3	4.2
18	84.4	88.8	94.0	96.0	96.0	11.6	4.4
19	84.6	88.9	93.3	96.3	96.3	11.7	4.3
20	84.1	88.3	92.3	95.7	95.7	11.6	4.2
21	82.9	87.1	90.8	94.4	94.4	11.5	4.2
22	81.8	85.7	89.1	93.0	93.0	11.2	3.9
23	80.9	84.7	87.7	92.4	92.4	11.5	3.8
24	79.7	83.7	86.4	91.4	91.4	11.7	4.0
25	78.7	82.9	85.3	90.8	90.8	12.1	4.2
26	77.4	81.8	84.1	89.4	89.4	12.0	4.4
27	76.0	80.6	83.2	88.6	88.6	12.6	4.6
28	73.7	78.6	81.6	86.9	87.9	13.2	4.9
29	72.3	77.7	80.9	86.2	86.2	13.9	5.4
30	72.1	77.3	80.5	85.8	87.2	13.7	5.2
31	72.1	77.3	80.8	85.7	87.1	13.6	5.2



TABLE G-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 69 95 KT. FLY BY MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	68.4	77.0	87.2	84.9	84.9	16.5	8.6
2	70.7	78.0	87.7	86.0	86.0	15.3	7.3
3	74.5	79.9	88.3	87.9	89.2	13.4	5.4
4	78.2	82.7	89.2	90.9	92.4	12.7	4.5
5	80.7	84.6	90.3	92.6	93.9	11.9	3.9
6	81.8	85.5	90.8	93.5	93.5	11.7	3.7
7	81.8	85.4	91.2	93.5	93.5	11.7	3.6
8	81.5	85.3	91.5	93.6	93.6	12.1	3.8
9	81.5	85.5	92.4	93.6	93.6	12.1	4.0
10	82.0	86.1	92.9	93.8	93.8	11.8	4.1
11	82.5	86.8	93.4	94.0	95.2	11.5	4.3
12	83.5	87.7	93.5	94.5	95.5	11.0	4.2
13	84.7	88.6	93.8	95.3	95.3	10.6	3.9
14	86.2	89.6	94.0	96.9	97.5	10.7	3.4
15	86.6	90.1	94.2	97.9	98.4	11.3	3.5
OH → 16	86.6	90.2	94.3	97.9	97.9	11.3	3.6
17	86.0	90.0	94.3	97.5	97.5	11.5	4.0
18	85.7	89.5	94.0	96.8	96.8	11.1	3.8
19	84.7	88.8	93.4	96.2	96.2	11.5	4.1
20	83.6	87.8	92.0	95.3	95.3	11.7	4.2
21	82.5	86.7	90.5	94.1	94.1	11.6	4.2
22	81.8	85.9	88.8	93.2	93.2	11.4	4.1
23	81.0	85.0	87.5	92.6	92.6	11.6	4.0
24	79.5	83.9	86.4	91.6	91.6	12.1	4.4
25	77.6	82.2	85.2	90.1	90.1	12.5	4.6
26	76.3	81.0	84.2	89.0	89.0	12.7	4.7
27	75.7	80.4	83.7	88.4	89.6	12.7	4.7
28	75.0	79.7	82.9	87.7	87.7	12.7	4.7
29	73.5	78.5	82.3	86.7	86.7	13.2	5.0

TABLE G-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

*with truck*

OCTOBER 28 1976

EVENT 43 9 DEGREE APPROACH MIC. CENTERLINE (HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	75.2	81.9	91.2	89.2	89.2	14.0	6.7
2	76.3	82.6	91.9	90.0	90.0	13.7	6.3
3	77.1	83.2	92.6	90.7	90.7	13.6	6.1
4	78.2	84.1	92.8	91.7	91.7	13.5	5.9
5	78.7	84.7	92.7	92.3	93.4	13.6	6.0
6	80.2	86.1	92.8	93.6	95.3	13.4	5.9
7	82.4	87.9	93.8	95.6	97.5	13.2	5.5
8	83.6	89.4	94.9	96.8	98.8	13.2	5.8
9	83.8	89.8	95.3	97.2	98.6	13.4	6.0
10	82.9	89.4	95.2	96.7	98.0	13.8	6.5
11	82.5	89.3	95.1	96.5	97.8	14.0	6.8
12	83.2	89.8	95.3	97.0	98.7	13.8	6.6
13	84.4	90.9	95.8	98.3	99.9	13.9	6.5
14	85.6	92.2	96.7	99.7	101.5	14.1	6.6
15	86.4	93.3	97.5	100.7	102.4	14.3	6.9
16	86.6	93.4	97.8	100.9	102.6	14.3	6.8
17	86.6	93.4	98.1	100.8	102.2	14.2	6.8
OH → 18	86.8	93.3	98.4	100.7	100.7	13.9	6.5
19	87.2	94.0	99.1	101.4	101.4	14.2	6.8
20	88.2	95.0	100.0	102.4	102.4	14.2	6.8
21	88.3	95.3	100.3	102.5	102.5	14.2	7.0
22	88.0	95.1	100.4	102.4	102.4	14.4	7.1
23	86.6	93.7	99.6	101.3	101.3	14.7	7.1
24	85.0	92.2	98.7	99.6	99.6	14.6	7.2
25	84.4	90.9	97.8	98.3	98.3	13.9	6.5
26	85.1	91.6	97.9	99.0	99.0	13.9	6.5
27	86.0	92.5	97.9	100.0	100.0	14.0	6.5
28	85.5	92.1	97.2	99.8	99.8	14.3	6.6
29	84.1	90.4	96.1	98.3	99.6	14.2	6.3
30	81.7	87.7	94.5	95.7	97.0	14.0	6.0
31	80.0	85.2	93.3	93.1	94.1	13.1	5.2
32	78.9	83.9	92.1	91.7	91.7	12.8	5.0
33	77.7	83.0	91.3	90.9	90.9	13.2	5.3
34	76.1	81.8	90.0	90.0	90.0	13.9	5.7
35	74.3	80.6	88.8	89.0	89.0	14.7	6.3
36	73.2	79.7	87.6	88.2	88.2	15.0	6.5

TABLE G-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

*with truck*

OCTOBER 28 1976

EVENT 49 60 KT.FLY BY MIC. CENTERLINE(HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	69.7	77.5	85.4	85.2	85.2	15.5	7.8
2	71.3	78.4	86.0	86.3	87.4	15.0	7.1
3	72.7	79.6	86.9	87.4	89.0	14.7	6.9
4	74.5	81.0	88.0	88.7	89.9	14.2	6.5
5	75.5	81.5	88.3	89.5	89.5	14.0	6.0
6	76.0	82.1	88.9	90.3	90.3	14.3	6.1
7	76.6	82.3	89.2	90.7	91.7	14.1	5.7
8	77.1	83.0	90.2	91.3	91.3	14.2	5.9
9	78.0	83.6	90.9	91.9	91.9	13.9	5.6
10	78.6	84.2	91.8	92.3	92.3	13.7	5.6
11	79.8	85.4	92.2	92.9	92.9	13.1	5.6
12	80.9	86.3	92.6	94.0	94.0	13.1	5.4
13	82.0	87.4	93.3	95.4	95.4	13.4	5.4
14	83.2	88.0	93.9	96.0	96.0	12.8	4.8
OH → 15	84.1	89.1	94.3	96.6	96.6	12.5	5.0
16	84.5	89.4	93.9	96.7	96.7	12.2	4.9
17	84.3	89.3	93.4	96.6	96.6	12.3	5.0
18	84.1	88.7	93.0	96.4	96.4	12.3	4.6
19	83.6	88.2	93.4	95.8	95.8	12.2	4.6
20	83.7	88.2	93.8	95.2	95.2	11.5	4.5
21	82.9	87.7	93.9	94.5	94.5	11.6	4.8
22	82.3	87.2	93.8	93.9	93.9	11.6	4.9
23	81.2	85.7	93.2	92.7	92.7	11.5	4.5
24	80.7	84.9	92.4	92.3	93.5	11.6	4.2
25	80.6	84.7	91.7	92.3	92.3	11.7	4.1
26	80.3	84.8	91.3	92.3	92.3	12.0	4.5
27	80.3	84.6	90.7	91.9	91.9	11.6	4.3
28	80.1	84.3	90.3	91.6	91.6	11.5	4.2
29	80.2	83.9	89.8	91.5	92.6	11.3	3.7
30	79.7	83.7	89.3	91.3	92.6	11.6	4.0
31	78.7	82.8	88.1	90.5	91.8	11.8	4.1
32	77.3	82.1	87.6	89.4	90.6	12.1	4.8
33	76.5	81.1	86.9	88.5	89.9	12.0	4.6
34	75.8	80.7	86.6	88.2	89.4	12.4	4.9
35	75.1	79.7	85.3	87.6	89.0	12.5	4.6
36	73.4	78.6	84.6	86.4	88.2	13.0	5.2
37	71.3	77.3	82.9	84.7	86.0	13.4	6.0
38	69.0	76.7	82.1	83.8	83.8	14.8	7.7

# TABLE G-IV

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 50 60 KT. FLY BY MIC.CENTERLINE(HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	72.2	79.3	88.3	87.0	88.5	14.8	7.1
2	72.3	79.5	88.5	87.1	88.4	14.8	7.2
3	72.9	80.2	88.6	87.9	88.9	15.0	7.3
4	75.2	81.3	89.1	88.7	89.8	13.5	6.1
5	77.0	82.1	89.7	89.8	91.5	12.8	5.1
6	77.9	83.3	90.3	90.7	92.4	12.8	5.4
7	78.9	84.4	91.1	92.1	93.6	13.2	5.5
8	79.9	85.8	92.1	93.8	93.8	13.9	5.9
9	82.2	88.3	93.5	96.0	96.0	13.8	6.1
10	83.6	89.8	94.7	97.4	97.4	13.8	6.2
11	84.0	90.0	94.8	97.6	97.6	13.6	6.0
12	84.2	90.3	95.1	97.9	97.9	13.7	6.1
13	84.0	89.8	94.6	97.8	97.8	13.8	5.8
14	83.7	89.3	94.1	97.5	97.5	13.8	5.6
15	82.8	87.8	93.0	96.1	96.1	13.3	5.0
16	82.8	87.5	92.5	95.1	95.1	12.3	4.7
17	83.8	88.1	93.1	95.7	95.7	11.9	4.3
OH → 18	84.2	88.1	93.1	95.8	95.8	11.6	3.9
19	84.2	88.2	92.9	95.9	95.9	11.7	4.0
20	83.5	87.6	92.2	95.5	95.5	12.0	4.1
21	82.8	87.3	92.1	94.5	94.5	11.7	4.5
22	82.2	86.9	92.6	94.0	94.0	11.8	4.7
23	81.6	86.3	93.0	93.4	93.4	11.8	4.7
24	80.9	85.5	92.7	92.5	92.5	11.6	4.6
25	79.6	84.2	92.3	91.4	91.4	11.8	4.6
26	78.5	83.5	91.5	90.4	90.4	11.9	5.0
27	78.3	83.5	90.9	90.3	90.3	12.0	5.2
28	78.3	83.4	90.4	90.3	90.3	12.0	5.1
29	78.4	83.1	90.0	90.1	90.1	11.7	4.7
30	78.3	82.5	89.6	90.2	91.3	11.9	4.2
31	78.0	82.2	88.8	90.1	91.5	12.1	4.2
32	77.5	82.1	88.2	89.9	91.4	12.4	4.6
33	77.4	81.9	87.6	89.7	91.0	12.3	4.5
34	77.4	81.7	87.1	89.5	90.7	12.1	4.3
35	77.3	81.4	86.7	89.3	90.5	12.0	4.1
36	76.4	80.9	86.0	88.5	89.6	12.1	4.5
37	75.3	80.2	85.4	87.6	87.6	12.3	4.9
38	74.0	79.2	84.6	86.6	87.7	12.6	5.2
39	73.3	78.5	84.2	86.4	88.1	13.1	5.2
40	72.8	78.1	83.4	85.9	87.9	13.1	5.3
41	71.5	77.5	82.7	85.0	86.8	13.5	6.0

# TABLE G-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

*With Truck*

OCTOBER 28 1976

EVENT 51 6 DEGREE APPROACH MIC. CENTERLINE(HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	73.0	81.0	89.7	88.2	89.6	15.2	8.0
2	73.9	81.3	90.0	88.7	90.1	14.8	7.4
3	75.3	82.2	90.4	89.8	91.3	14.5	6.9
4	76.7	83.2	90.7	90.6	90.6	13.9	6.5
5	78.5	84.5	91.3	91.7	91.7	13.2	6.0
6	79.7	85.7	92.2	92.7	92.7	13.0	6.0
7	80.7	86.6	93.0	93.5	94.6	12.8	5.9
8	81.1	87.1	93.6	94.0	95.3	12.9	6.0
9	81.2	87.1	94.0	94.0	95.4	12.8	5.9
10	80.8	87.0	94.3	93.9	93.9	13.1	6.2
11	81.3	87.6	94.8	94.7	94.7	13.4	6.3
12	83.1	89.4	95.7	96.6	96.6	13.5	6.3
13	84.6	91.0	96.6	98.1	98.1	13.5	6.4
14	85.7	92.3	97.6	99.1	99.1	13.4	6.6
15	86.2	92.9	98.0	99.9	99.9	13.7	6.7
16	86.8	93.5	98.4	100.9	102.3	14.1	6.7
17	86.9	93.5	98.3	101.1	101.1	14.2	6.6
18	87.0	93.4	98.4	101.1	101.1	14.1	6.4
OH → 19	86.8	93.0	98.2	100.6	100.6	13.8	6.2
20	86.5	92.8	98.1	100.1	100.1	13.6	6.3
21	86.0	92.3	97.9	99.8	99.8	13.8	6.3
22	85.5	91.8	98.0	99.3	99.3	13.8	6.3
23	84.7	90.9	98.3	98.6	98.6	13.9	6.2
24	83.9	90.0	98.5	97.9	97.9	14.0	6.1
25	82.7	88.8	98.1	96.7	96.7	14.0	6.1
26	82.0	87.9	97.2	95.7	95.7	13.7	5.9
27	81.3	87.3	95.9	95.1	96.1	13.8	6.0
28	81.4	87.8	95.1	95.4	95.4	14.0	6.4
29	81.4	87.8	94.4	95.6	95.6	14.2	6.4
30	81.3	87.4	93.6	95.4	96.4	14.1	6.1
31	80.0	86.0	92.3	94.2	94.2	14.2	6.0
32	79.0	84.8	91.4	92.7	92.7	13.7	5.8
33	78.0	83.8	90.5	91.4	91.4	13.4	5.8
34	77.1	83.0	90.1	90.7	91.8	13.6	5.9
35	75.2	81.6	89.1	89.6	89.6	14.4	6.4
36	73.0	80.4	88.3	88.7	88.7	15.7	7.4
37	72.3	79.5	87.1	88.2	89.3	15.9	7.2

TABLE G-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 55 85 KT. FLY BY MIC.CENTERLINE(HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	70.6	78.8	91.0	86.5	87.7	15.9	8.2
2	71.6	79.5	91.4	87.1	87.1	15.5	7.9
3	73.1	80.5	91.9	87.9	87.9	14.8	7.4
4	74.3	81.1	92.1	88.8	90.3	14.5	6.8
5	74.8	81.5	92.1	89.2	90.6	14.4	6.7
6	76.1	82.6	92.1	90.2	90.2	14.1	6.5
7	76.7	83.2	92.4	90.7	90.7	14.0	6.5
8	77.5	83.9	93.3	91.4	91.4	13.9	6.4
9	78.5	84.6	94.2	91.9	91.9	13.4	6.1
10	80.0	85.7	95.3	93.3	93.3	13.3	5.7
11	80.8	86.4	95.9	93.7	93.7	12.9	5.6
12	81.8	87.2	96.2	94.7	94.7	12.9	5.4
13	82.4	87.9	95.7	95.4	95.4	13.0	5.5
14	83.4	88.7	95.0	96.5	96.5	13.1	5.3
15	83.8	89.2	94.0	96.7	96.7	12.9	5.4
OH → 16	84.4	89.3	92.8	96.5	96.5	12.1	4.9
17	84.2	88.9	91.9	96.1	96.1	11.9	4.7
18	84.0	88.4	91.8	95.7	95.7	11.7	4.4
19	83.3	87.5	92.3	94.7	94.7	11.4	4.2
20	82.6	86.9	93.0	93.9	93.9	11.3	4.3
21	82.0	86.3	93.8	93.5	93.5	11.5	4.3
22	81.2	85.8	93.7	92.9	92.9	11.7	4.6
23	80.5	84.8	92.7	92.1	92.1	11.6	4.3
24	79.0	83.2	91.1	91.0	91.0	12.0	4.2
25	77.8	82.2	90.2	90.0	90.0	12.2	4.4
26	76.1	81.1	89.4	88.7	88.7	12.6	5.0
27	75.5	80.8	88.3	88.4	88.4	12.9	5.3
28	74.5	80.0	87.0	87.6	87.6	13.1	5.5
29	74.4	79.9	86.2	87.4	87.4	13.0	5.5
30	73.8	79.2	85.2	86.9	88.2	13.1	5.4
31	73.3	78.8	84.3	86.4	87.7	13.1	5.5
32	72.0	77.9	83.3	85.2	85.2	13.2	5.9

# TABLE G-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

*With truck*

OCTOBER 28 1976

EVENT 66 85 KT. FLY BY MIC. CENTERLINE (HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	74.1	80.9	91.0	89.5	90.8	15.4	6.8
2	73.7	81.0	91.9	89.4	90.4	15.7	7.3
3	74.2	81.5	92.6	89.4	89.4	15.2	7.3
4	76.1	82.5	93.2	90.3	90.3	14.2	6.4
5	77.7	83.5	94.3	91.4	91.4	13.7	5.8
6	78.7	84.5	95.5	92.6	92.6	13.9	5.8
7	80.1	85.6	96.7	93.5	93.5	13.4	5.5
8	81.1	86.8	97.2	94.5	94.5	13.4	5.7
9	82.8	88.2	97.5	96.4	96.4	13.6	5.4
10	83.7	89.1	97.3	97.4	97.4	13.7	5.4
OH → 11	84.7	90.0	96.9	98.1	98.1	13.4	5.3
12	85.3	90.2	95.7	97.8	97.8	12.5	4.9
13	85.3	89.9	94.5	97.8	97.8	12.5	4.6
14	84.8	89.3	92.9	97.1	97.1	12.3	4.5
15	83.6	88.1	92.7	95.9	95.9	12.3	4.5
16	82.8	87.4	92.9	94.4	94.4	11.6	4.6
17	82.1	86.6	93.0	93.7	93.7	11.6	4.5
18	81.7	86.0	92.5	93.2	94.5	11.5	4.3
19	80.9	85.0	91.2	92.3	93.8	11.4	4.1
20	80.0	84.0	89.8	91.5	93.0	11.5	4.0
21	79.4	83.5	88.7	90.9	90.9	11.5	4.1
22	78.8	82.6	87.7	90.2	90.2	11.4	3.8
23	77.5	81.7	87.0	89.4	89.4	11.9	4.2
24	76.0	80.6	86.5	88.5	89.8	12.5	4.6
25	75.0	80.4	86.4	88.1	89.5	13.1	5.4
26	75.3	80.6	86.1	88.2	89.9	12.9	5.3
27	75.0	80.3	85.7	88.1	89.6	13.1	5.3
28	74.7	79.9	85.1	87.9	89.7	13.2	5.2

# TABLE G-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

*With truck*

OCTOBER 28 1976

EVENT 67 95 KT. FLY BY MIC. CENTERLINE(HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	70.9	79.5	92.0	86.4	86.4	15.5	8.6
2	72.8	80.6	93.0	87.3	87.3	14.5	7.8
3	75.0	82.0	93.7	88.9	90.3	13.9	7.0
4	76.9	83.0	94.7	90.4	90.4	13.5	6.1
5	78.4	84.4	95.7	92.0	92.0	13.6	6.0
6	79.3	85.6	96.9	93.2	93.2	13.9	6.3
7	81.6	87.5	97.9	94.8	95.5	13.2	5.9
8	83.3	89.1	98.4	96.9	97.7	13.6	5.8
9	85.0	90.5	98.3	98.5	99.0	13.5	5.5
10	85.9	91.3	97.7	99.1	99.1	13.2	5.4
OH → 11	86.5	91.7	96.6	99.2	99.2	12.7	5.2
12	86.6	91.6	95.5	98.8	98.8	12.2	5.0
13	86.8	91.3	94.4	98.6	98.6	11.8	4.5
14	86.4	90.7	94.0	97.8	97.8	11.4	4.3
15	85.5	89.7	93.2	96.4	96.4	10.9	4.2
16	84.0	88.0	92.1	94.8	94.8	10.8	4.0
17	82.4	86.3	90.6	93.4	93.4	11.0	3.9
18	81.3	85.1	89.6	92.6	92.6	11.3	3.8
19	80.7	84.9	89.2	92.1	92.1	11.4	4.2
20	80.8	84.9	88.6	92.0	92.0	11.2	4.1
21	80.4	84.8	88.1	91.9	92.9	11.5	4.4
22	79.3	83.8	87.4	91.1	91.1	11.8	4.5
23	77.9	82.8	87.2	90.4	90.4	12.5	4.9
24	77.2	81.9	86.7	90.0	91.2	12.8	4.7
25	76.8	81.3	86.0	89.7	90.9	12.9	4.5
26	75.9	80.7	85.5	89.0	90.2	13.1	4.8
27	74.7	80.1	84.9	88.3	89.4	13.6	5.4
28	73.4	79.6	84.5	87.7	89.2	14.3	6.2



TABLE G-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

With Truck

OCTOBER 28 1976

EVENT 68 95 KT. FLY BY MIC. CENTERLINE (HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DED-DBA
1	72.4	81.6	94.0	38.8	90.2	16.4	9.2
2	74.0	82.5	95.1	39.7	89.7	15.7	8.5
3	74.4	82.8	95.8	90.1	90.1	15.7	8.4
4	75.6	83.9	96.7	91.4	91.4	15.8	8.3
5	78.1	85.5	97.6	92.9	92.9	14.8	7.4
6	80.0	86.8	93.5	94.0	95.4	14.0	6.8
7	81.5	88.0	99.1	94.8	94.8	13.3	6.5
8	82.0	88.0	99.1	95.0	95.0	13.0	6.0
9	82.2	88.3	98.8	95.7	95.7	13.5	6.1
10	83.1	88.8	98.4	96.8	96.8	13.7	5.7
11	84.2	89.8	97.8	97.8	97.8	13.6	5.6
12	85.8	90.6	96.6	98.4	98.4	12.6	4.8
OH → 13	86.5	90.8	94.6	97.9	97.9	11.4	4.3
14	86.7	90.8	93.3	97.9	97.9	11.2	4.1
15	86.2	90.2	92.8	97.3	97.3	11.1	4.0
16	85.5	89.8	93.3	96.9	96.9	11.4	4.3
17	84.2	88.7	93.5	95.7	95.7	11.5	4.5
18	83.2	87.7	93.1	94.6	94.6	11.4	4.5
19	81.9	86.2	92.0	93.5	93.5	11.6	4.3
20	80.8	85.0	90.5	92.6	92.6	11.8	4.2
21	79.4	84.2	89.4	91.6	91.6	12.2	4.8
22	78.2	83.3	88.3	90.3	90.3	12.1	5.1
23	77.5	82.4	87.6	89.6	89.6	12.1	4.9
24	77.0	81.7	86.7	89.2	90.2	12.2	4.7
25	76.5	81.5	86.1	88.9	88.9	12.4	5.0
26	76.3	81.3	85.4	88.7	88.7	12.4	5.0
27	76.3	81.0	85.5	88.9	88.9	12.6	4.7
28	76.1	80.7	85.1	88.7	90.2	12.6	4.6

TABLE G-IV

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

*With truck*

OCTOBER 28 1976

EVENT 69 95 KT. FLY BY MIC. CENTERLINE (HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	72.8	80.7	93.0	88.8	88.8	16.0	7.9
2	73.3	81.2	93.5	89.1	89.1	15.8	7.9
3	74.9	82.2	94.3	90.2	90.2	15.3	7.3
4	76.9	83.9	95.3	91.4	91.4	14.5	7.0
5	79.5	85.8	96.5	93.1	93.1	13.6	6.3
6	82.1	87.9	97.2	95.7	96.4	13.6	5.8
7	83.9	89.5	97.5	97.5	98.1	13.6	5.6
8	85.6	90.8	97.0	98.5	98.5	12.9	5.2
9	86.5	91.8	96.1	98.9	98.9	12.4	5.3
OH → 10	86.6	91.6	94.7	98.4	98.4	11.8	5.0
11	86.3	90.9	93.3	98.0	98.0	11.7	4.6
12	86.1	90.4	92.6	97.6	97.6	11.5	4.3
13	85.9	90.2	92.0	97.0	97.0	11.1	4.3
14	84.7	89.2	91.2	95.8	95.8	11.1	4.5
15	82.5	86.9	89.8	93.7	94.9	11.2	4.4
16	80.3	84.8	88.6	92.0	92.0	11.7	4.5
17	79.5	84.1	88.1	91.4	91.4	11.9	4.6
18	78.6	83.2	87.5	90.5	90.5	11.9	4.6
19	77.4	82.3	86.8	89.7	89.7	12.3	4.9
20	76.2	81.2	86.0	88.6	88.6	12.4	5.0
21	75.0	80.4	85.1	88.0	88.0	13.0	5.4
22	74.4	80.0	84.5	87.4	88.6	13.0	5.6
23	74.3	79.7	84.0	87.3	88.6	13.0	5.4

# TABLE G-II

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

*With truck*

OCTOBER 28 1976

EVENT 70 3 DEGREE APPROACH MIC. CENTERLINE(HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	73.2	81.0	90.0	88.8	89.9	15.6	7.8
2	74.5	81.6	90.3	89.3	89.3	14.8	7.1
3	77.0	83.1	90.9	91.3	91.3	14.3	6.1
4	79.3	84.6	91.3	92.6	92.6	13.3	5.3
5	80.0	85.2	91.6	92.9	94.1	12.9	5.2
6	80.3	85.6	92.1	92.9	94.4	12.6	5.3
7	79.9	85.5	92.3	93.0	94.4	13.1	5.6
8	80.7	86.2	92.9	93.8	93.8	13.1	5.5
9	82.0	87.5	93.8	94.8	94.8	12.8	5.5
10	82.5	88.0	94.4	95.1	95.1	12.6	5.5
11	82.6	88.4	95.0	95.5	96.7	12.9	5.8
12	82.1	88.2	95.4	95.5	96.1	13.4	6.1
13	82.9	89.2	96.1	96.6	97.3	13.7	6.3
14	83.8	90.1	96.8	97.4	98.1	13.6	6.3
15	84.9	91.3	97.8	98.5	99.0	13.6	6.4
16	85.5	92.0	98.4	99.3	99.3	13.8	6.5
17	86.0	92.6	98.8	100.0	100.0	14.0	6.6
18	87.1	93.2	99.0	100.6	100.6	13.5	6.1
19	87.9	93.8	99.2	101.2	101.2	13.3	5.9
OH → 20	88.2	93.9	99.2	101.4	101.4	13.2	5.7
21	87.6	93.2	98.7	100.9	100.9	13.3	5.6
22	86.6	91.9	98.8	99.8	99.8	13.2	5.3
23	85.9	91.0	99.3	98.3	98.3	12.4	5.1
24	85.2	90.3	99.5	97.5	97.5	12.3	5.1
25	84.6	89.9	98.8	96.9	98.0	12.3	5.3
26	83.7	89.2	97.6	96.1	97.5	12.4	5.5
27	83.1	88.2	96.2	95.2	96.8	12.1	5.1
28	82.5	87.5	95.4	94.7	96.1	12.2	5.0
29	82.1	86.5	94.1	94.0	95.1	11.9	4.4
30	81.7	86.2	93.1	93.6	94.8	11.9	4.5
31	81.4	85.7	91.9	93.2	94.6	11.8	4.3
32	80.9	85.1	91.0	92.8	94.5	11.9	4.2
33	80.4	84.6	90.6	92.5	94.1	12.1	4.2
34	79.5	83.7	90.1	91.6	92.8	12.1	4.2
35	78.4	82.9	89.5	90.5	90.5	12.1	4.5
36	76.8	81.9	88.1	89.2	89.2	12.4	5.1
37	75.1	81.0	87.4	88.1	89.2	13.0	5.9
38	73.6	80.0	86.3	87.3	88.5	13.7	6.4

# TABLE G-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 67 95 KT. FLY BY MIC. CENTERLINE(SOFT)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	69.2	77.8	90.6	86.1	86.1	16.9	8.6
2	70.3	78.5	91.1	86.5	86.5	16.2	8.2
3	74.1	80.1	92.2	88.2	89.6	14.1	6.0
4	76.2	81.7	93.4	89.7	91.2	13.5	5.5
5	77.5	83.0	94.5	91.0	91.0	13.5	5.5
6	78.8	84.4	95.6	92.2	92.2	13.4	5.6
7	81.0	86.7	96.6	94.4	94.4	13.4	5.7
8	83.5	89.0	97.2	96.8	96.8	13.3	5.5
9	85.3	90.3	97.3	98.2	98.2	12.9	5.0
OH → 10	85.8	90.8	96.8	98.5	98.5	12.7	5.0
11	86.3	90.9	95.9	98.6	98.6	12.3	4.6
12	86.1	90.9	94.8	98.9	98.9	12.8	4.8
13	85.8	90.3	93.4	98.3	98.3	12.5	4.5
14	84.6	89.0	92.1	96.6	96.6	12.0	4.4
15	83.4	87.4	91.1	95.0	95.0	11.6	4.0
16	82.1	86.1	90.5	93.5	93.5	11.4	4.0
17	80.9	85.0	89.5	92.7	92.7	11.8	4.1
18	80.0	83.9	88.7	91.7	91.7	11.7	3.9
19	79.8	83.6	87.9	91.3	91.3	11.5	3.8
20	79.4	83.4	87.3	90.9	90.9	11.5	4.0
21	78.3	82.5	86.7	90.0	90.0	11.7	4.2
22	77.5	81.7	86.0	89.3	90.5	11.8	4.2
23	77.0	81.4	85.6	89.4	90.8	12.4	4.4
24	76.4	80.7	85.0	89.2	90.2	12.8	4.3
25	74.8	79.4	84.4	88.0	89.5	13.2	4.6
26	72.8	78.2	83.6	86.9	88.5	14.1	5.4
27	72.3	78.0	83.2	86.8	88.1	14.5	5.7

# TABLE G-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

*with truck*

OCTOBER 28 1976

EVENT 68 95 KT. FLY BY MIC. CENTERLINE(SOFT)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	69.3	78.6	91.8	86.5	86.5	17.2	9.3
2	70.9	79.7	92.9	87.6	87.6	16.7	8.8
3	72.1	80.5	93.6	88.6	88.6	16.5	8.4
4	74.4	82.0	94.7	89.9	89.9	15.5	7.6
5	77.1	83.9	95.8	91.3	92.8	14.2	6.8
6	80.3	86.1	97.0	93.4	93.4	13.1	5.8
7	81.2	86.8	97.6	94.0	94.0	12.8	5.6
8	81.9	87.7	97.7	95.2	95.2	13.3	5.8
9	81.8	87.9	97.6	95.7	95.7	13.9	6.1
10	82.9	88.8	97.7	96.7	96.7	13.8	5.9
11	84.0	89.6	97.4	97.4	97.4	13.4	5.6
12	84.9	89.8	96.5	97.6	97.6	12.7	4.9
OH → 13	85.3	89.8	94.9	97.6	97.6	12.3	4.5
14	85.3	89.4	93.3	97.6	97.6	12.3	4.1
15	84.7	88.8	92.1	96.7	96.7	12.0	4.1
16	84.1	88.0	91.7	95.5	95.5	11.4	3.9
17	82.7	86.6	91.6	94.1	94.1	11.4	3.9
18	81.3	85.4	91.4	93.1	93.1	11.8	4.1
19	79.5	84.0	90.3	91.2	91.2	11.7	4.5
20	78.0	82.7	88.9	90.3	90.3	12.3	4.7
21	77.2	81.8	87.9	89.8	89.8	12.6	4.6
22	76.5	80.8	86.9	88.8	88.8	12.3	4.3
23	76.4	80.7	86.3	88.6	88.6	12.2	4.3
24	75.8	80.3	85.2	88.1	88.1	12.3	4.5
25	75.3	79.8	84.5	87.7	87.7	12.4	4.5
26	74.7	79.3	83.8	87.5	88.8	12.8	4.6
27	74.4	79.2	83.7	87.7	88.8	13.3	4.8
28	73.8	78.6	83.1	87.2	88.7	13.4	4.8

# TABLE G-IV

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

*with truck*

OCTOBER 28 1976

EVENT 69 95 KT. FLY BY MIC. CENTERLINE (SOFT)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	70.4	79.0	91.5	87.5	87.5	17.1	8.6
2	72.1	80.2	92.4	88.3	89.5	16.2	8.1
3	74.0	81.4	93.1	89.2	89.2	15.2	7.4
4	75.5	82.8	94.2	90.2	90.2	14.7	7.3
5	77.8	84.5	95.4	91.7	91.7	13.9	6.7
6	80.8	86.8	96.3	94.3	94.3	13.5	6.0
7	83.4	88.8	96.7	96.6	96.6	13.2	5.4
8	84.9	90.1	96.5	97.6	97.6	12.7	5.2
9	85.5	90.4	95.9	97.8	97.8	12.3	4.9
OH → 10	86.2	90.7	95.0	98.5	98.5	12.3	4.5
11	86.0	90.2	93.6	98.3	98.3	12.3	4.2
12	85.3	89.4	92.0	97.3	97.3	12.0	4.1
13	83.7	88.0	90.6	95.4	96.4	11.7	4.3
14	82.3	87.0	89.8	93.9	94.9	11.6	4.7
15	81.2	85.8	89.0	92.6	93.7	11.4	4.6
16	79.9	84.3	88.0	91.5	91.5	11.6	4.4
17	78.3	82.5	87.3	90.4	90.4	12.1	4.2
18	76.9	81.3	86.4	89.1	89.1	12.2	4.4
19	75.4	80.0	85.4	88.3	88.3	12.9	4.6
20	75.1	79.8	84.7	88.1	89.1	13.0	4.7
21	75.3	79.9	84.2	87.9	89.4	12.6	4.6

# TABLE G-IV

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

*Without truck*

OCTOBER 28 1976

EVENT 80 105 KT. FLY BY MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	71.4	79.5	89.3	88.0	89.5	16.6	8.1
2	72.9	80.2	89.8	88.7	89.7	15.8	7.3
3	74.0	81.2	90.7	89.7	89.7	15.7	7.2
4	75.9	82.2	91.0	90.6	92.0	14.7	6.3
5	77.8	83.7	91.4	91.9	93.2	14.1	5.9
6	80.1	85.1	91.6	93.2	93.2	13.1	5.0
7	81.7	86.5	91.6	94.1	94.1	12.4	4.8
8	83.7	87.9	91.4	94.9	94.9	11.2	4.2
9	84.7	89.2	91.3	96.1	96.1	11.4	4.5
10	85.4	89.7	91.5	96.6	96.6	11.2	4.3
11	85.8	90.0	92.1	97.3	97.3	11.5	4.2
OH → 12	86.7	90.3	92.7	98.1	98.1	11.4	3.6
13	86.8	90.6	93.3	98.2	98.2	11.4	3.8
14	86.5	90.4	93.2	97.7	97.7	11.2	3.9
15	85.4	89.8	93.2	96.9	96.9	11.5	4.4
16	84.7	88.9	92.3	96.2	96.2	11.5	4.2
17	83.6	87.9	91.3	95.4	95.4	11.8	4.3
18	82.1	86.4	89.6	93.9	93.9	11.8	4.3
19	80.4	84.5	88.2	92.1	92.1	11.7	4.1
20	78.8	82.8	87.1	90.3	90.3	11.5	4.0
21	77.0	81.2	85.7	89.0	89.0	12.0	4.2
22	74.5	79.6	84.2	87.4	88.6	12.9	5.1
23	73.3	79.0	83.4	87.1	87.1	13.8	5.7
24	72.5	78.3	82.8	86.4	87.7	13.9	5.8

TABLE G-V  
NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64  
*Without truck*

OCTOBER 28 1976

EVENT 81      105 KT. FLY BY   MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	73.4	80.6	89.7	89.1	90.2	15.7	7.2
2	75.3	82.0	90.5	90.6	92.6	15.3	6.7
3	76.2	83.0	91.2	91.6	93.2	15.4	6.8
4	77.3	83.9	91.8	92.4	92.4	15.1	6.6
5	80.3	85.8	91.9	93.7	94.9	13.4	5.5
6	81.7	86.8	92.0	94.3	94.3	12.6	5.1
7	83.0	87.8	91.5	94.9	94.9	11.9	4.8
8	82.6	87.3	91.1	94.5	94.5	11.9	4.7
9	84.3	88.4	91.4	95.5	95.5	11.2	4.1
10	84.9	89.0	91.8	96.3	96.3	11.4	4.1
11	85.6	89.8	92.2	97.0	97.0	11.4	4.2
12	86.6	90.5	92.6	97.9	97.9	11.3	3.9
OH → 13	87.7	91.4	93.1	98.6	98.6	10.9	3.7
14	87.5	91.2	93.2	98.5	98.5	11.0	3.7
15	86.0	89.9	92.3	97.3	97.3	11.3	3.9
16	83.7	87.9	91.4	95.5	95.5	11.8	4.2
17	83.8	87.6	90.5	95.3	95.3	11.5	3.8
18	83.5	87.0	89.6	95.1	95.1	11.6	3.5
19	82.6	85.9	88.1	94.0	94.0	11.4	3.3
20	79.9	83.6	86.3	91.6	91.6	11.7	3.7
21	78.4	82.4	85.2	89.8	89.8	11.4	4.0
22	77.4	81.7	84.6	89.2	90.4	11.8	4.3
23	76.9	81.2	84.0	89.0	90.2	12.1	4.3
24	76.2	80.4	83.2	88.6	88.6	12.4	4.2
25	74.9	79.5	82.7	87.6	88.7	12.7	4.6



# TABLE G-II

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

*Without truck*

OCTOBER 28 1976

EVENT 80 105 KT. FLY BY MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	67.4	77.3	89.2	84.9	84.9	17.5	9.9
2	68.9	78.0	89.8	85.5	85.5	16.6	9.1
3	73.1	79.6	90.8	87.1	87.1	14.0	6.5
4	74.0	80.6	91.8	87.8	87.8	13.8	6.6
5	75.5	81.4	92.5	88.8	90.0	13.3	5.9
6	77.2	82.5	93.1	90.2	91.8	13.0	5.3
7	78.5	83.3	93.5	91.1	92.7	12.6	4.8
8	79.3	84.0	94.0	92.0	92.0	12.7	4.7
9	80.5	85.2	94.3	93.1	93.1	12.6	4.7
10	81.8	86.2	94.7	93.9	93.9	12.1	4.4
11	82.9	87.2	95.2	94.3	94.3	11.4	4.3
12	82.9	87.2	95.5	94.4	94.4	11.5	4.3
13	82.6	87.0	95.1	94.4	94.4	11.8	4.4
14	82.3	86.9	94.3	94.2	94.2	11.9	4.6
15	83.2	87.9	93.6	95.0	95.0	11.8	4.7
OH → 16	83.8	88.4	93.4	95.5	95.5	11.7	4.6
17	83.9	88.4	92.9	95.6	95.6	11.7	4.5
18	82.8	87.2	91.9	94.9	94.9	12.1	4.4
19	82.4	86.7	90.6	94.8	94.8	12.4	4.3
20	81.4	85.6	89.1	93.9	93.9	12.5	4.2
21	80.9	85.0	88.0	93.2	93.2	12.3	4.1
22	79.0	83.3	86.9	91.4	91.4	12.4	4.3
23	77.6	82.1	86.1	90.2	90.2	12.6	4.5
24	75.8	80.7	85.0	88.8	88.8	13.0	4.9
25	73.5	79.0	83.7	87.1	88.4	13.6	5.5
26	72.1	78.0	82.7	86.2	87.3	14.1	5.9
27	70.8	76.8	81.8	85.6	85.6	14.8	6.0
28	70.5	76.8	81.5	85.7	86.8	15.1	6.2

TABLE G-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

Without Truck

OCTOBER 28 1976

EVENT 81 105 KT. FLY BY MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	66.7	77.7	90.2	85.3	85.3	18.6	11.0
2	67.7	78.4	90.9	85.9	87.0	18.2	10.7
3	69.1	78.9	91.5	86.5	87.8	17.4	9.8
4	72.5	80.2	92.2	88.3	89.4	15.8	7.7
5	76.0	81.6	92.9	90.2	91.2	14.2	5.6
6	77.3	82.9	93.2	91.3	91.3	13.5	5.1
7	79.4	84.3	93.2	92.3	92.3	12.9	4.9
8	79.9	84.7	93.4	92.7	92.7	12.8	4.8
9	80.6	85.3	93.8	93.2	93.2	12.6	4.7
10	81.0	85.6	94.1	93.6	93.6	12.6	4.6
11	81.9	86.6	94.0	94.1	94.1	12.2	4.7
12	82.5	87.0	94.0	94.6	94.6	12.1	4.5
13	82.8	87.2	93.7	94.6	94.6	11.8	4.4
OH → 14	82.8	86.9	93.1	94.3	94.3	11.5	4.1
15	82.2	86.2	91.7	93.6	93.6	11.4	4.0
16	81.2	85.4	90.2	92.9	92.9	11.7	4.2
17	80.6	84.9	89.1	92.5	92.5	11.9	4.3
18	80.5	84.8	88.4	92.6	92.6	12.1	4.3
19	80.8	84.9	87.8	92.8	92.8	12.0	4.1
20	79.7	84.1	86.7	92.0	92.0	12.3	4.4
21	78.5	83.0	85.7	90.8	90.8	12.3	4.5
22	75.9	80.7	84.4	88.9	88.9	13.0	4.8
23	74.7	79.7	83.8	87.9	89.0	13.2	5.0
24	73.3	78.6	83.5	87.1	88.5	13.8	5.3
25	73.2	78.3	83.3	87.1	88.1	13.9	5.1
26	73.2	78.3	83.3	86.9	86.9	13.7	5.1
27	72.6	77.6	82.7	86.3	86.3	13.7	5.0
28	71.3	77.0	82.1	85.5	85.5	14.2	5.7
29	69.5	75.8	81.0	84.2	84.2	14.7	6.3
30	68.7	75.3	80.5	83.8	83.8	15.1	6.6

# TABLE G-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

*Without truck*

OCTOBER 28 1976

EVENT 74 6 DEGREE APPROACH MIC. CENTERLINE(HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	68.2	78.1	88.5	85.6	85.6	17.4	9.9
2	69.2	78.6	88.9	86.2	86.2	17.0	9.4
3	70.4	79.2	89.3	86.5	86.5	16.1	8.8
4	74.3	80.8	89.8	88.1	88.1	13.8	6.5
5	78.1	82.8	90.8	90.9	92.1	12.8	4.7
6	80.2	84.4	92.0	92.5	93.7	12.3	4.2
7	80.7	84.8	92.8	93.2	93.2	12.5	4.1
8	79.7	84.4	93.4	92.6	92.6	12.9	4.7
9	78.3	83.7	93.5	91.8	92.9	13.5	5.4
10	77.2	83.6	93.8	91.1	92.4	13.9	6.4
11	78.2	84.3	93.9	91.7	91.7	13.5	6.1
12	79.0	85.0	94.2	92.4	92.4	13.4	6.0
13	79.6	85.5	94.5	93.0	93.0	13.4	5.9
14	79.7	85.8	94.9	93.3	93.3	13.6	6.1
15	79.9	85.9	95.2	93.7	94.9	13.8	6.0
16	80.8	87.1	95.8	94.6	96.8	13.8	6.3
17	82.4	88.8	96.3	96.1	98.7	13.7	6.4
18	83.9	90.4	96.9	97.6	100.3	13.7	6.5
19	85.1	91.7	97.6	99.0	101.3	13.9	6.6
20	85.5	92.1	98.1	99.5	101.2	14.0	6.6
21	85.4	92.1	98.4	99.6	100.9	14.2	6.7
22	85.5	92.0	98.7	99.6	100.8	14.1	6.5
23	85.8	92.5	99.0	99.9	99.9	14.1	6.7
24	86.0	92.5	98.9	100.1	100.1	14.1	6.5
25	85.7	92.3	98.4	99.6	99.6	13.9	6.6
26	85.2	91.8	97.5	98.9	98.9	13.7	6.6
27	84.9	91.4	96.6	98.8	98.8	13.9	6.5
28	84.5	90.7	95.8	98.6	98.6	14.1	6.2
29	84.2	90.4	95.5	98.4	98.4	14.2	6.2
30	84.4	90.7	95.5	98.3	98.3	13.9	6.3
31	84.5	90.9	95.4	98.1	98.1	13.6	6.4
32	84.4	90.7	95.1	98.0	98.0	13.6	6.3
33	83.6	89.6	94.4	97.0	97.0	13.4	6.0
34	82.6	88.3	93.6	95.6	96.7	13.0	5.7
35	81.2	86.9	92.9	94.3	95.5	13.1	5.7
36	80.9	86.4	92.3	93.6	94.8	12.7	5.5
37	80.3	86.1	91.9	93.6	93.6	13.3	5.8
38	80.0	85.6	91.3	93.2	94.3	13.2	5.6
39	78.5	84.2	90.4	92.0	92.0	13.5	5.7
40	76.8	82.6	89.3	90.2	91.3	13.4	5.8
41	74.8	80.9	88.8	88.5	89.7	13.7	6.1
42	73.9	80.1	88.2	87.5	88.8	13.6	6.2
43	74.5	80.3	87.7	87.9	89.2	13.4	5.8

# TABLE G-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

*Without truck*

OCTOBER 28 1976

EVENT 76 85 KT. FLY BY MIC. CENTERLINE(HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	70.9	80.5	91.5	87.9	89.1	17.0	9.6
2	71.8	81.1	92.0	88.9	88.9	17.1	9.3
3	72.9	81.6	92.7	89.5	89.5	16.6	8.7
4	76.2	83.2	93.2	90.6	91.6	14.4	7.0
5	79.3	85.1	93.9	92.5	92.5	13.2	5.8
6	80.6	86.2	95.0	93.6	93.6	13.0	5.6
7	82.6	87.9	96.0	95.3	95.3	12.7	5.3
8	84.9	89.5	97.1	96.7	96.7	11.8	4.6
9	86.6	91.1	98.0	97.8	99.1	11.2	4.5
10	86.7	91.6	98.6	98.5	99.7	11.8	4.9
11	86.8	91.8	99.4	99.3	100.4	12.5	5.0
12	86.7	91.9	99.4	99.8	100.8	13.1	5.2
13	87.3	92.3	98.6	100.2	100.7	12.9	5.0
OH → 14	87.3	92.2	96.9	99.8	99.8	12.5	4.9
15	87.3	91.9	95.3	99.2	99.2	11.9	4.6
16	86.9	91.3	93.9	99.1	99.1	12.2	4.4
17	86.5	90.8	92.9	99.0	100.4	12.5	4.3
18	85.5	89.9	91.8	98.4	100.4	12.9	4.4
19	84.3	88.6	91.0	96.9	98.9	12.6	4.3
20	82.2	86.6	90.5	94.6	96.1	12.4	4.4
21	80.5	84.8	89.5	91.9	92.9	11.4	4.3
22	78.6	83.1	88.2	90.4	91.9	11.8	4.5
23	77.2	82.1	87.0	89.4	90.7	12.2	4.9
24	76.4	81.4	86.6	88.8	90.1	12.4	5.0
25	76.0	81.1	86.2	88.5	88.5	12.5	5.1
26	75.4	80.5	86.1	88.1	88.1	12.7	5.1

TABLE G-V  
NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

without truck

OCTOBER 28 1976

EVENT 77 85 KT. FLY BY MIC. CENTERLINE (HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	73.3	81.1	91.2	88.9	89.9	15.6	7.8
2	73.5	81.4	91.5	89.0	89.0	15.5	7.9
3	74.6	81.8	91.9	89.4	90.5	14.8	7.2
4	79.0	84.2	92.9	91.9	91.9	12.9	5.2
5	81.4	86.2	93.9	93.5	93.5	12.1	4.8
6	82.1	87.1	95.2	94.3	94.3	12.2	5.0
7	83.3	87.9	96.1	95.2	96.5	11.9	4.6
8	84.1	88.5	96.8	95.7	96.8	11.6	4.4
9	84.7	89.4	97.1	96.4	97.1	11.7	4.7
10	85.6	90.6	97.3	97.6	98.3	12.0	5.0
11	86.2	91.4	97.4	98.8	99.5	12.6	5.2
12	86.9	92.2	97.5	99.9	100.5	13.0	5.3
13	87.0	92.3	97.2	100.1	100.1	13.1	5.3
14	87.3	92.2	96.4	99.9	99.9	12.6	4.9
04 → 15	86.7	91.6	94.9	98.7	98.7	12.0	4.9
16	85.9	90.5	93.1	97.8	97.8	11.9	4.6
17	84.7	89.0	91.4	96.5	96.5	11.8	4.3
18	83.9	87.8	90.4	95.4	95.4	11.5	3.9
19	82.9	86.9	90.0	94.3	94.3	11.4	4.0
20	81.9	86.0	89.6	93.0	94.2	11.1	4.1
21	80.9	85.0	89.2	92.1	93.5	11.2	4.1
22	79.8	83.9	88.3	91.1	92.4	11.3	4.1
23	78.9	83.2	87.8	90.6	91.6	11.7	4.3
24	77.7	82.5	87.0	89.6	89.6	11.9	4.8
25	76.1	81.3	86.3	88.8	88.8	12.7	5.2
26	74.7	80.1	85.3	87.7	87.7	13.0	5.4
27	74.5	80.0	85.1	87.4	88.5	12.9	5.5

# TABLE G-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

*Without truck*

OCTOBER 28 1976

EVENT 78 95 KT. FLY BY MIC. CENTERLINE(HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	71.6	81.5	93.4	88.8	88.8	17.2	9.9
2	72.6	82.0	94.0	89.6	89.6	17.0	9.4
3	76.3	83.8	94.9	91.2	91.2	14.9	7.5
4	80.0	86.1	95.8	93.6	93.6	13.6	6.1
5	84.9	89.8	97.1	97.2	98.6	12.3	4.9
6	86.2	90.7	97.8	98.2	98.2	12.0	4.5
7	87.3	91.7	98.3	98.8	100.0	11.5	4.4
8	87.4	92.3	98.7	99.3	100.7	11.9	4.9
9	88.2	93.5	99.5	100.8	102.2	12.6	5.3
10	88.2	93.9	100.0	101.7	102.9	13.5	5.7
11	87.9	93.5	99.7	101.6	102.3	13.7	5.6
OH → 12	86.9	92.4	98.5	100.5	100.5	13.6	5.5
13	86.0	91.3	96.5	98.7	98.7	12.7	5.3
14	85.3	90.2	94.0	97.7	97.7	12.4	4.9
15	84.5	89.0	91.5	96.5	96.5	12.0	4.5
16	83.4	87.5	89.5	95.0	95.0	11.6	4.1
17	81.8	86.1	88.6	93.5	93.5	11.7	4.3
18	80.9	85.4	88.5	92.8	92.8	11.9	4.5
19	80.1	84.6	88.2	92.1	92.1	12.0	4.5
20	79.5	84.1	87.7	91.4	91.4	11.9	4.6
21	78.5	83.2	87.1	90.5	90.5	12.0	4.7
22	77.4	82.3	86.8	90.0	90.0	12.6	4.9
23	77.0	81.8	86.5	89.4	89.4	12.4	4.8
24	76.9	81.8	86.4	89.3	90.4	12.4	4.9

# TABLE G-IV

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

*Without truck*

OCTOBER 28 1976

EVENT 79 95 KT. FLY BY MIC. CENTERLINE (HALD)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	72.2	80.9	92.0	88.3	88.8	16.6	8.7
2	74.6	82.1	92.8	90.1	90.1	15.5	7.5
3	76.7	83.4	93.6	91.2	91.2	14.5	6.7
4	79.1	85.2	94.6	92.7	92.7	13.6	6.1
5	80.7	86.4	95.3	94.5	94.5	13.8	5.7
6	82.4	87.4	96.0	95.6	96.8	13.2	5.0
7	83.9	88.9	96.9	96.5	97.6	12.6	5.0
8	86.0	90.9	97.8	98.0	99.3	12.0	4.9
9	88.2	93.1	98.9	100.6	101.9	12.4	4.9
10	89.3	94.4	99.4	102.2	103.2	12.9	5.1
OH → 11	89.2	94.4	99.2	102.3	103.0	13.1	5.2
12	88.2	93.5	97.8	101.3	101.3	13.1	5.3
13	87.1	91.9	95.7	99.4	99.4	12.3	4.8
14	86.5	91.0	93.4	98.2	98.2	11.7	4.5
15	86.0	90.1	91.7	97.1	97.1	11.1	4.1
16	84.9	89.0	90.3	96.0	97.4	11.1	4.1
17	83.1	87.2	89.2	94.2	95.7	11.1	4.1
18	80.8	85.2	88.1	92.6	94.4	11.8	4.4
19	79.2	83.3	86.7	90.8	92.2	11.6	4.1
20	79.1	82.8	86.5	90.6	92.0	11.5	3.7
21	78.3	82.8	86.9	90.4	90.4	12.1	4.5
22	77.6	82.3	86.9	89.9	89.9	12.3	4.7

# TABLE G-II

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

*Without truck*

OCTOBER 28 1976

EVENT 80 105 KT. FLY BY MIC. CENTERLINE (HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	71.3	81.2	93.1	89.1	90.3	17.8	9.9
2	71.5	81.7	93.7	89.2	89.2	17.7	10.2
3	72.5	82.4	94.5	89.8	89.8	17.3	9.9
4	77.0	84.5	95.6	91.4	91.4	14.4	7.5
5	81.1	87.3	97.3	94.7	95.8	13.6	6.2
6	83.4	89.2	98.6	96.7	97.2	13.3	5.8
7	84.1	89.6	99.4	97.0	98.0	12.9	5.5
8	85.2	91.1	99.8	98.4	99.6	13.2	5.9
9	87.2	93.1	100.2	101.2	102.3	14.0	5.9
10	88.5	94.2	99.9	102.3	103.1	13.8	5.7
OH → 11	88.4	93.8	98.7	101.9	101.9	13.5	5.4
12	87.0	92.2	96.4	99.7	99.7	12.7	5.2
13	85.6	90.5	93.8	97.9	97.9	12.3	4.9
14	84.7	89.5	92.3	96.9	98.1	12.2	4.8
15	84.1	88.6	90.9	96.3	97.7	12.2	4.5
16	82.7	87.3	90.0	94.7	96.1	12.0	4.6
17	81.8	86.1	88.8	93.4	94.9	11.6	4.3
18	80.7	84.8	87.5	92.2	93.8	11.5	4.1
19	79.6	83.9	87.0	91.3	92.9	11.7	4.3
20	77.5	82.5	86.7	90.2	91.4	12.7	5.0
21	75.1	81.1	86.5	89.0	89.0	13.9	6.0
22	73.3	80.1	86.0	88.2	88.2	14.9	6.8



# TABLE G-V

## NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

*Without truck*

OCTOBER 28 1976

EVENT 81 105 KT. FLY BY MIC. CENTERLINE(HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	70.4	80.9	92.5	88.2	88.2	17.8	10.5
2	72.3	81.8	93.1	89.2	89.2	16.9	9.5
3	75.3	83.1	94.0	90.7	91.7	15.4	7.8
4	78.3	84.9	94.9	92.0	92.0	13.7	6.6
5	81.3	87.2	95.6	94.6	94.6	13.3	5.9
6	84.0	89.2	96.2	96.5	97.6	12.5	5.2
7	84.9	90.1	97.0	97.2	97.2	12.3	5.2
8	85.5	90.6	98.2	97.9	98.9	12.4	5.1
9	87.7	92.8	99.8	100.5	101.7	12.8	5.1
10	88.8	94.1	100.6	102.1	103.1	13.3	5.3
11	89.6	94.7	100.2	102.7	103.4	13.1	5.1
12	88.7	93.7	98.4	101.5	101.5	12.8	5.0
13	87.8	92.4	95.7	99.6	99.6	11.8	4.6
OH → 14	86.3	90.8	92.8	97.9	97.9	11.6	4.5
15	85.1	89.5	91.1	96.7	96.7	11.6	4.4
16	83.6	87.9	89.9	95.4	96.7	11.8	4.3
17	81.7	86.3	89.0	93.6	95.0	11.9	4.6
18	80.2	85.0	87.8	91.9	93.4	11.7	4.8
19	79.7	84.1	86.8	91.4	92.7	11.7	4.4
20	79.3	83.8	86.2	90.9	92.5	11.6	4.5
21	78.1	82.9	86.3	90.4	91.9	12.3	4.8
22	76.5	82.0	86.1	89.7	91.2	13.2	5.5

# TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

*with truck*

OCTOBER 28 1976

EVENT 43 9 DEGREE APPROACH MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-10.0	-8.0	-6.0	-4.0	-2.0	0	2.0	4.0	5.5
17	70.4	70.6	75.3	74.7	75.1	77.6	78.9	82.5	81.7
18	83.2	84.9	85.9	86.0	85.9	81.6	79.9	80.7	76.7
19	71.7	74.4	74.8	75.7	77.8	76.4	76.1	78.3	79.2
20	71.7	70.8	72.1	72.5	73.3	70.9	74.0	76.4	77.7
21	81.6	76.7	74.8	72.1	71.6	75.9	75.8	69.3	72.1
22	68.0	63.5	65.6	74.9	80.0	83.8	81.0	70.9	65.7
23	63.5	67.5	75.0	83.5	86.5	86.4	86.5	77.2	68.3
24	73.1	78.5	80.9	86.5	87.5	88.3	87.4	78.7	71.8
25	77.5	80.8	81.0	82.2	81.9	78.5	77.6	78.6	74.1
26	75.9	77.1	76.1	73.6	77.4	79.4	78.9	73.1	72.8
27	67.8	65.8	65.0	72.6	78.3	77.4	78.6	74.8	66.2
28	62.3	67.0	70.1	69.7	73.2	76.2	76.0	73.2	70.1
29	66.1	66.9	65.9	71.3	74.9	75.2	75.3	71.7	68.6
30	61.0	64.3	67.6	67.6	74.5	74.4	74.2	69.4	67.6
31	60.5	61.3	64.7	66.6	72.6	73.0	74.7	70.1	68.3
32	59.4	60.9	63.9	66.1	72.1	71.7	71.4	67.5	64.8
33	55.9	56.9	59.6	62.8	68.7	68.9	68.8	65.9	62.4
34	55.0	55.4	56.1	59.7	66.3	66.3	66.1	62.1	59.6
35	55.0	55.0	55.2	57.1	63.6	63.8	63.6	59.9	57.1
36	55.0	55.0	55.0	55.0	59.6	61.2	60.7	57.2	55.3
37	55.0	55.0	55.6	57.1	65.4	64.8	61.0	57.6	55.3
38	55.0	55.0	55.0	55.0	55.0	55.3	55.4	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	76.7	78.7	79.6	82.7	85.7	85.7	85.4	80.5	77.1
D	82.4	84.2	85.2	88.8	90.9	91.1	90.6	85.5	82.4
OASPL	89.2	90.3	91.4	93.0	93.8	95.3	95.3	91.4	88.2
PNL	90.3	92.1	93.0	96.2	98.8	99.2	98.7	93.6	90.3
PNLT	91.8	92.1	94.5	96.2	101.5	101.4	98.7	93.6	90.3

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

*with truck*

OCTOBER 28 1976

EVENT 51 6 DEGREE APPROACH MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-8.0	-6.5	-5.0	-3.5	-2.0	-0.5	0	1.0	2.5	5.0
17	69.2	70.9	73.3	73.8	76.1	76.6	77.8	79.4	80.4	80.3
18	80.7	83.6	86.3	84.9	84.6	82.6	82.3	83.6	81.8	79.1
19	71.1	72.4	75.5	76.7	74.2	73.6	73.0	74.9	76.3	76.2
20	73.0	71.8	73.3	74.7	73.6	70.7	68.8	69.8	72.5	76.4
21	75.5	73.4	74.9	70.4	68.0	73.2	74.1	74.1	72.5	67.5
22	65.4	63.4	64.5	68.5	77.8	82.0	81.9	80.6	77.9	65.5
23	62.6	68.4	75.1	78.1	84.7	86.9	86.6	84.4	81.5	71.3
24	69.2	78.7	84.3	83.3	88.0	86.1	84.7	82.6	83.3	75.1
25	74.6	82.2	84.6	82.4	83.6	76.8	74.2	73.3	77.6	74.7
26	74.0	77.2	78.0	74.0	75.1	77.7	78.1	79.5	78.2	69.5
27	66.7	65.1	67.2	73.0	79.1	78.2	77.0	77.4	79.4	71.3
28	58.3	67.7	71.2	72.1	74.3	74.9	75.5	77.6	75.4	70.9
29	62.2	66.9	66.2	70.0	75.3	75.2	75.6	76.8	73.8	68.7
30	58.9	65.5	67.4	68.6	73.1	75.2	74.9	75.5	73.2	66.1
31	57.9	62.1	64.0	67.6	71.0	73.5	73.4	74.2	72.4	66.6
32	55.9	61.6	63.3	66.1	70.4	72.6	72.4	72.4	68.7	63.0
33	55.0	57.6	59.0	62.0	67.1	69.1	69.1	69.8	67.1	61.2
34	55.0	55.4	56.4	59.0	62.9	65.8	66.0	66.4	63.8	57.0
35	55.0	55.0	55.0	55.6	60.1	62.8	63.0	63.2	60.9	55.0
36	55.0	55.0	55.0	55.0	56.3	58.8	59.4	59.8	57.7	55.0
37	55.0	55.0	55.0	55.0	61.9	60.9	61.9	61.3	57.1	55.0
38	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	73.6	79.6	82.1	81.5	85.3	85.0	84.5	85.0	83.9	76.8
D	79.6	84.9	87.8	86.9	90.7	90.3	89.8	89.6	88.7	82.0
OASPL	86.9	88.6	91.4	90.8	93.6	94.0	94.2	94.5	94.3	88.5
PNL	88.2	92.7	94.9	94.5	98.3	97.9	97.6	97.0	96.1	90.1
PNLT	89.4	92.7	96.4	94.5	100.4	99.2	99.2	98.3	96.1	90.1

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

with truck

OCTOBER 28 1976

EVENT 67 95 KT. FLY BY MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-6.0	-4.5	-3.0	-1.5	0	.5	1.5	3.0	4.5	5.5
17	78.0	79.3	77.9	74.2	79.1	81.9	85.6	81.4	81.9	82.3
18	82.0	85.1	87.8	87.5	91.1	91.3	88.3	77.8	75.1	72.5
19	73.1	78.3	79.7	78.6	75.7	75.9	75.9	75.9	75.5	74.1
20	71.2	75.7	77.0	75.4	72.9	71.2	70.7	73.2	76.3	76.7
21	78.7	82.8	83.3	74.4	69.0	70.1	71.1	64.7	66.6	68.7
22	69.2	71.8	69.9	66.5	74.0	77.5	79.3	73.5	63.0	60.4
23	69.0	67.6	64.9	76.5	81.8	83.1	82.3	76.6	69.5	62.9
24	63.6	65.4	74.6	81.0	84.4	84.9	83.7	79.4	75.1	70.4
25	61.5	73.6	81.3	82.8	81.5	80.4	76.7	75.3	73.9	72.2
26	69.0	77.8	83.2	80.5	80.9	82.2	82.3	75.5	69.2	70.6
27	71.9	79.1	80.0	76.8	83.7	83.4	82.4	78.5	70.2	65.0
28	70.8	74.0	75.2	79.8	79.2	80.2	79.4	72.2	70.1	67.8
29	66.1	70.4	77.7	77.8	80.5	79.7	77.2	72.5	69.4	66.5
30	65.6	73.5	75.4	78.0	79.6	79.5	77.6	71.9	67.2	66.0
31	64.5	68.9	74.6	75.9	78.1	78.3	77.1	70.1	65.9	64.2
32	59.8	66.3	71.2	73.9	75.7	75.1	72.8	66.9	61.4	60.5
33	56.0	61.3	66.0	69.5	71.8	71.4	69.5	63.6	57.9	56.7
34	55.0	60.2	65.3	65.6	68.1	68.2	66.0	58.9	55.2	55.0
35	55.0	55.4	58.7	60.0	64.2	64.0	61.7	55.3	55.0	55.0
36	55.0	55.0	55.0	55.8	58.6	58.9	57.5	55.0	55.0	55.0
37	55.0	55.0	55.0	55.0	55.2	56.1	55.8	55.0	55.0	55.0
38	55.0	55.0	55.0	55.0	55.4	55.0	55.0	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	75.4	81.3	85.2	86.2	87.8	87.7	86.6	81.5	76.9	74.6
D	81.0	85.8	89.0	89.7	91.9	92.0	90.8	85.9	81.6	79.9
OASPL	89.2	91.5	92.7	91.8	94.0	94.5	94.7	91.3	87.6	85.8
PNL	88.8	93.7	97.1	97.1	99.1	99.2	98.1	93.4	89.5	87.9
PNLT	88.8	95.0	97.1	97.1	99.1	99.2	98.1	93.4	89.5	87.9

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE G - VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

*With truck*

OCTOBER 28 1976

EVENT 68 95 KT. FLY BY MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-7.0	-5.0	-3.5	-3.0	-1.0	0	1.0	3.0	5.0	7.0
17	79.4	82.5	82.4	81.8	74.6	76.7	80.0	79.4	80.6	80.2
18	82.2	85.3	89.1	90.1	88.7	88.7	88.9	78.0	73.6	70.5
19	74.6	77.3	79.4	79.4	76.5	74.3	73.3	73.0	74.8	71.5
20	74.1	75.7	76.7	76.4	73.6	70.4	68.4	70.0	72.1	72.7
21	75.7	81.4	83.5	82.7	68.9	69.7	71.2	68.6	65.0	67.5
22	69.0	71.6	72.4	70.6	71.0	74.0	75.4	74.2	63.4	60.3
23	68.7	69.8	66.3	68.5	78.6	80.6	80.1	78.2	70.8	61.1
24	64.9	61.9	74.6	76.7	81.5	82.1	80.1	79.4	75.7	66.1
25	59.6	70.6	79.1	81.5	81.1	79.2	73.6	73.3	74.7	69.3
26	63.2	75.8	82.0	83.5	75.7	78.7	80.5	77.6	69.6	69.5
27	68.1	77.0	79.5	79.2	80.5	81.7	79.2	77.8	71.7	63.1
28	67.8	73.4	72.8	75.9	77.5	77.6	78.5	75.0	70.8	64.9
29	66.2	68.7	76.3	77.0	77.4	77.4	76.5	72.6	69.5	64.9
30	60.6	73.3	73.4	75.6	76.3	77.0	75.1	71.7	67.3	62.1
31	61.8	66.3	72.7	73.1	74.0	75.8	74.2	70.5	65.8	61.8
32	57.2	60.3	70.1	70.7	72.6	72.5	71.1	66.0	62.3	58.8
33	55.4	59.0	64.2	64.9	68.3	69.0	68.1	62.9	58.7	55.2
34	55.0	56.3	62.0	62.2	64.5	65.0	64.3	58.6	55.2	55.0
35	55.0	55.0	56.3	56.6	60.0	60.7	60.4	55.7	55.0	55.0
36	55.0	55.0	55.0	55.0	55.5	56.0	56.2	55.0	55.0	55.0
37	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
38	55.0	55.0	55.0	55.0	55.5	55.2	55.0	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	72.5	80.2	83.9	85.0	85.1	85.6	84.5	81.6	76.9	71.8
D	79.5	84.9	88.0	89.1	89.1	89.6	88.7	85.9	82.0	77.9
OASPL	88.9	92.3	94.1	94.8	91.9	92.3	93.0	91.7	87.1	83.2
PNL	87.3	92.4	96.3	97.2	96.2	96.9	96.1	93.2	89.7	86.2
PNLT	87.3	94.3	97.3	97.2	96.2	96.9	96.1	93.2	89.7	86.2

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

*With truck*

OCTOBER 28 1976

EVENT 69 95 KT. FLY BY MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-6.0	-4.5	-3.0	-1.5	0	1.5	3.0	4.5	6.0
17	76.7	77.6	77.3	75.3	78.7	86.8	84.1	77.1	79.7
18	81.0	83.5	86.7	88.5	90.2	88.8	76.1	73.1	71.8
19	74.1	75.2	78.2	77.7	77.0	74.4	75.7	76.5	72.9
20	72.1	73.7	75.0	74.8	72.5	69.8	72.2	75.4	76.5
21	77.3	79.7	79.9	74.9	69.5	70.2	65.2	65.0	67.3
22	67.8	68.9	66.9	66.5	74.2	78.2	74.3	65.8	59.1
23	65.5	66.5	63.0	75.5	81.3	81.1	77.8	71.1	63.3
24	58.4	62.4	70.8	81.9	83.8	81.6	78.9	74.7	69.6
25	59.1	71.2	78.2	82.6	81.1	74.3	74.8	73.9	72.0
26	66.8	74.9	80.0	78.4	79.4	80.3	76.6	70.4	70.9
27	68.6	75.1	76.3	77.9	83.2	79.8	77.9	72.8	64.2
28	67.5	71.7	71.7	78.7	78.1	78.5	73.1	73.0	68.2
29	62.1	68.1	75.5	78.8	79.5	76.3	73.8	69.7	67.1
30	61.9	71.2	74.0	77.9	79.0	75.7	71.2	67.7	65.1
31	62.1	65.2	71.9	76.5	77.2	74.3	69.7	66.3	62.8
32	57.0	64.0	68.0	74.1	74.6	71.4	66.3	62.4	59.8
33	55.0	59.3	63.3	69.8	70.2	66.7	62.3	58.1	55.5
34	55.0	56.7	62.1	66.3	66.8	63.0	58.1	55.2	55.0
35	55.0	55.0	55.8	61.2	61.7	59.4	55.3	55.0	55.0
36	55.0	55.0	55.0	56.7	57.1	55.6	55.0	55.0	55.0
37	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
38	55.0	55.0	55.0	55.0	55.3	55.0	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	72.1	78.3	82.3	85.9	87.1	84.5	81.2	77.6	74.3
D	79.0	83.1	86.3	90.0	91.2	89.2	85.7	82.0	79.6
OASPL	89.2	90.2	91.0	92.4	93.3	93.8	90.9	87.0	84.4
PNL	87.1	90.9	94.4	97.1	98.4	96.4	93.3	89.7	87.5
PNLT	87.1	92.4	94.4	97.1	98.4	96.4	93.3	89.7	87.5

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

*with truck*

OCTOBER 28 1976

EVENT 43 9 DEGREE APPROACH MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-17.0	-13.5	-10.0	-6.5	-3.0	0	.5	4.0	7.5	10.0
17	68.7	69.8	73.0	74.4	77.8	82.0	82.3	81.1	78.4	75.5
18	76.0	80.1	80.9	81.2	78.9	82.3	82.3	84.1	78.5	73.8
19	66.9	69.3	71.2	73.2	74.7	78.2	79.4	83.6	80.6	74.4
20	71.1	70.8	71.0	71.7	77.2	78.2	78.4	80.6	80.8	77.8
21	76.0	76.2	76.6	73.1	71.2	68.8	69.0	75.5	76.1	73.2
22	67.3	69.1	64.2	63.4	65.2	72.0	74.2	65.5	74.7	69.9
23	67.6	64.7	58.2	63.3	73.9	77.4	78.6	74.4	72.9	72.3
24	59.8	62.2	64.6	70.7	77.2	79.9	80.6	79.2	66.5	69.7
25	66.9	67.3	68.7	72.9	78.2	77.5	77.7	78.5	63.0	61.9
26	71.3	70.3	67.8	72.3	74.3	70.0	70.0	77.9	67.4	55.6
27	72.2	68.4	63.4	65.5	72.2	75.3	76.7	68.7	68.8	56.1
28	63.3	62.6	58.4	68.1	75.2	73.1	73.6	73.3	67.5	59.7
29	65.5	64.0	63.4	66.5	76.5	75.4	75.7	68.9	62.0	61.5
30	64.8	63.2	59.2	67.1	73.2	72.1	72.5	69.8	63.1	59.1
31	58.5	60.2	59.5	62.7	73.1	72.5	72.8	69.6	64.5	58.9
32	57.2	58.0	59.7	62.2	72.1	71.1	71.1	66.3	60.4	56.4
33	55.0	55.0	56.0	58.8	67.4	68.1	68.4	64.1	56.9	55.0
34	55.0	55.0	55.0	56.3	64.5	65.3	65.8	60.8	55.1	55.0
35	55.0	55.0	55.0	55.0	62.2	62.3	63.0	57.9	55.0	55.0
36	55.0	55.0	55.0	55.0	58.2	58.8	59.4	55.5	55.0	55.0
37	55.0	55.0	55.0	55.0	63.2	60.5	60.6	55.0	55.0	55.0
38	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	73.5	72.5	70.8	75.2	82.7	82.7	82.9	80.3	73.8	69.6
D	78.7	78.4	78.1	80.8	86.7	87.1	87.4	86.0	80.4	77.6
OASPL	84.7	86.5	88.2	89.9	92.0	90.0	90.5	90.8	87.6	84.6
PNL	87.4	86.9	86.4	88.6	94.3	94.7	95.2	93.8	89.5	86.3
PNLT	87.4	86.9	87.9	88.6	96.5	95.8	96.3	95.3	89.5	86.3

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

*With truck*

OCTOBER 28 1976

EVENT 51 6 DEGREE APPROACH MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-20.0	-15.5	-11.0	-6.5	-2.0	0	2.5	7.0	11.5	13.5
17	68.6	70.9	70.8	69.8	77.1	80.9	81.9	77.4	78.4	74.7
18	75.5	84.4	81.9	79.9	84.2	85.3	82.0	78.0	76.2	70.5
19	70.9	76.8	70.5	72.3	78.6	77.4	80.8	81.7	77.6	73.0
20	70.8	72.2	72.4	75.4	77.4	75.5	75.4	81.3	79.7	75.2
21	75.5	79.2	75.1	75.4	69.2	67.5	70.0	74.2	74.2	71.2
22	66.1	70.5	68.9	65.7	67.4	73.8	74.8	73.5	74.5	65.8
23	63.8	66.3	65.2	63.5	75.8	77.0	79.1	70.5	79.4	64.4
24	60.8	64.5	60.8	67.2	77.8	78.5	79.4	66.8	78.2	63.8
25	58.1	63.2	65.7	72.5	76.5	74.8	76.0	72.3	76.1	64.1
26	62.2	66.1	70.9	74.3	71.4	73.2	71.0	72.5	70.8	62.4
27	63.4	68.6	71.3	66.9	75.0	77.7	76.3	71.3	65.9	58.1
28	59.3	63.4	64.7	63.5	73.4	73.2	71.7	66.7	62.6	56.4
29	57.1	60.7	64.3	67.4	75.6	75.7	73.8	62.3	63.5	55.5
30	55.5	60.3	63.7	61.7	72.2	74.0	72.0	62.0	62.3	55.1
31	55.0	56.7	58.5	59.9	71.2	72.4	70.7	62.5	65.6	55.0
32	55.0	55.0	56.3	59.3	69.2	71.4	67.9	59.5	60.0	55.0
33	55.0	55.0	55.0	56.3	65.9	67.6	65.5	56.4	56.3	55.0
34	55.0	55.0	55.0	55.2	62.3	63.8	62.3	55.0	55.0	55.0
35	55.0	55.0	55.0	55.0	59.5	60.9	59.6	55.0	55.0	55.0
36	55.0	55.0	55.0	55.0	55.9	57.1	56.5	55.0	55.0	55.0
37	55.0	55.0	55.0	55.0	58.9	57.2	56.8	55.0	55.0	55.0
38	55.0	55.0	55.0	55.0	55.2	55.0	55.0	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	66.6	71.3	73.1	74.5	81.6	82.7	81.4	75.2	76.4	66.1
D	75.6	79.3	78.8	80.0	85.9	86.9	86.0	81.3	82.9	75.4
OASPL	83.1	87.4	87.2	89.8	91.6	90.5	90.3	87.3	88.2	81.6
PNL	84.6	88.0	87.4	88.8	93.3	94.4	93.9	89.9	91.1	84.2
PNLT	84.6	88.0	87.4	90.4	94.4	94.4	93.9	89.9	92.6	84.2

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0



# TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 67 95 KT. FLY BY MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-7.0	-5.5	-4.0	-2.5	-1.0	0	.5	2.0	3.5	6.5
17	78.2	77.7	78.0	75.5	75.4	79.2	82.4	85.0	79.6	69.6
18	81.5	82.2	85.6	89.6	89.8	91.1	90.9	83.6	73.9	70.0
19	70.2	71.1	74.9	76.5	76.3	74.7	74.5	74.4	76.7	74.5
20	66.7	70.7	72.5	73.9	73.9	74.7	74.3	72.7	75.4	75.5
21	77.6	81.0	79.7	76.3	68.7	68.6	67.9	66.9	66.3	67.5
22	67.2	69.3	68.8	65.2	68.1	73.5	74.9	72.6	64.7	63.7
23	66.3	73.2	68.2	68.8	78.2	80.6	81.5	78.3	71.5	58.2
24	63.4	64.3	67.7	76.4	81.6	82.7	82.4	81.1	75.8	61.6
25	60.6	70.3	75.8	80.9	82.3	80.3	78.3	76.0	76.2	68.3
26	66.4	77.1	79.3	81.6	77.3	78.4	79.6	76.7	71.5	71.9
27	70.1	78.5	79.7	77.7	80.1	82.7	82.8	80.0	74.8	69.7
28	69.9	75.9	73.0	78.1	79.6	77.9	77.3	74.5	72.5	63.6
29	62.7	67.9	72.8	76.5	78.6	79.5	78.3	75.3	70.5	66.7
30	64.2	71.3	72.0	76.0	76.9	77.6	77.9	73.9	69.1	64.3
31	62.2	65.6	71.3	74.5	76.4	76.7	76.1	73.4	68.8	63.8
32	57.1	63.6	68.2	71.7	73.3	74.2	73.7	70.2	63.9	59.0
33	55.0	57.9	62.8	68.2	70.0	70.5	69.8	66.4	59.9	55.1
34	55.0	55.2	59.2	64.1	66.2	66.3	65.9	62.3	56.1	55.0
35	55.0	55.0	55.5	58.9	62.1	62.5	61.8	58.6	55.0	55.0
36	55.0	55.0	55.0	55.1	57.1	57.6	57.2	55.7	55.0	55.0
37	55.0	55.0	55.0	55.0	55.0	55.4	55.4	55.3	55.0	55.0
38	55.0	55.0	55.0	55.0	58.1	56.8	55.5	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	73.6	80.9	81.5	84.4	85.8	86.7	86.4	83.4	79.2	73.7
D	79.6	84.2	85.9	88.5	90.0	90.5	90.4	87.7	83.4	78.5
OASPL	89.0	90.6	92.5	93.9	94.1	94.6	94.6	91.1	86.4	82.0
PNL	87.4	92.4	94.0	96.2	97.0	98.0	97.9	95.2	90.9	87.2
PNLT	87.4	93.9	94.0	96.2	97.5	98.0	97.9	95.2	90.9	87.2

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

*With Truck*

OCTOBER 28 1976

EVENT 68 95 KT. FLY BY MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-7.0	-5.5	-4.0	-3.0	-2.5	-1.0	0	.5	2.0	3.5	6.0
17	80.5	82.8	82.9	79.4	77.0	75.1	77.0	78.9	82.1	76.6	68.4
18	82.4	84.4	86.6	87.1	86.3	87.6	89.3	89.4	83.2	73.6	70.9
19	72.4	74.8	77.9	76.8	75.6	75.5	72.7	72.0	72.9	74.7	72.9
20	68.4	72.7	74.0	73.5	72.7	70.1	67.7	66.4	68.4	72.2	72.7
21	77.8	79.9	81.8	78.7	74.7	67.5	73.3	74.2	70.0	63.6	67.0
22	68.8	69.9	71.4	67.7	65.3	71.7	75.3	76.5	73.6	71.2	61.8
23	68.0	71.1	66.7	72.9	75.0	78.1	80.4	81.6	79.0	74.9	60.9
24	60.7	67.9	76.0	79.9	80.0	80.6	79.4	79.3	79.4	77.9	67.0
25	63.7	75.2	81.3	83.6	82.9	77.5	72.7	72.1	71.8	73.7	70.1
26	68.0	81.7	82.5	81.7	79.6	76.8	79.1	80.2	79.1	71.9	70.0
27	67.9	80.9	77.4	74.5	75.5	80.2	78.7	76.9	75.8	75.7	64.1
28	66.3	73.6	73.9	78.0	77.9	75.6	77.0	78.7	77.3	71.5	65.3
29	59.8	71.7	73.8	73.2	72.6	75.5	76.0	77.0	74.3	72.3	65.5
30	61.2	69.8	71.3	73.2	72.4	75.3	75.3	75.4	73.5	70.0	61.4
31	59.3	62.9	69.6	70.7	71.0	73.9	74.2	74.2	72.4	68.7	61.2
32	57.2	60.3	66.1	68.4	68.2	71.6	71.9	71.8	69.2	64.7	58.2
33	55.0	56.6	60.3	64.1	64.4	67.0	67.8	68.0	65.5	60.9	55.1
34	55.0	55.0	59.1	61.6	61.2	64.0	64.2	64.0	61.4	56.4	55.0
35	55.0	55.0	55.7	57.0	57.0	60.0	60.7	60.5	57.4	55.0	55.0
36	55.0	55.0	55.0	55.0	55.0	56.2	56.3	56.3	55.0	55.0	55.0
37	55.0	55.0	55.0	55.0	55.0	55.0	55.9	55.9	55.0	55.0	55.0
38	55.0	55.0	55.0	55.0	55.0	56.1	55.8	55.3	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	72.0	82.1	82.7	83.7	83.3	84.1	84.2	84.4	82.9	79.7	72.3
D	79.3	86.2	88.0	88.8	88.0	87.9	88.4	88.8	87.1	83.7	77.7
OASPL	89.7	93.0	94.7	95.4	95.2	95.0	94.4	94.0	90.8	86.4	80.9
PNL	87.5	94.2	95.7	96.1	95.5	95.5	95.5	96.0	94.4	91.4	86.2
PNLT	87.5	94.2	95.7	97.5	96.8	95.5	95.5	96.0	94.4	91.4	86.2

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

*With truck*

OCTOBER 28 1976

EVENT 69 95 KT. FLY BY MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-7.0	-5.5	-4.0	-2.5	-1.0	-.5	0	.5	2.0	3.5	6.0
17	76.0	76.5	77.5	77.9	74.8	75.8	78.3	81.0	86.4	80.6	71.9
18	80.9	82.9	84.9	88.4	89.3	90.1	90.7	90.9	84.7	75.5	73.2
19	70.1	71.1	74.0	75.6	74.5	75.8	76.1	75.7	74.5	77.2	74.6
20	67.8	70.5	71.7	73.0	72.2	72.0	70.9	70.5	70.8	74.3	74.2
21	76.3	78.8	76.3	72.6	66.0	66.8	69.1	71.0	69.7	64.0	68.3
22	66.7	66.8	66.1	62.8	70.0	72.0	73.7	76.6	75.0	71.6	60.7
23	64.1	72.6	63.7	68.6	77.7	79.9	80.7	81.0	79.8	75.2	63.5
24	59.3	63.4	67.8	75.6	80.8	82.0	82.2	81.9	80.6	78.7	70.6
25	58.8	71.3	75.4	79.1	79.8	78.8	77.3	75.2	73.3	74.9	72.0
26	65.9	77.9	80.1	78.5	76.1	78.3	79.9	80.8	80.3	74.2	70.8
27	67.6	79.3	78.0	71.8	82.0	83.4	83.3	82.0	78.8	77.1	64.8
28	65.3	75.5	72.5	76.5	77.9	77.6	78.5	78.9	76.8	72.1	69.3
29	60.6	70.0	74.3	73.8	79.7	79.5	78.6	77.1	74.1	73.2	67.9
30	60.6	71.4	70.8	75.5	76.3	76.8	77.1	77.4	73.7	71.1	67.0
31	59.8	64.7	71.0	71.6	75.9	76.3	76.0	75.9	72.5	70.2	64.5
32	55.6	62.1	67.5	69.5	73.6	74.2	74.0	73.5	68.5	66.1	60.9
33	55.0	56.8	61.6	64.9	69.1	69.7	69.4	69.2	64.4	61.9	56.6
34	55.0	55.3	58.9	62.0	65.3	65.6	65.3	65.1	60.5	58.1	55.0
35	55.0	55.0	55.0	57.0	61.9	62.6	62.2	61.8	57.2	55.0	55.0
36	55.0	55.0	55.0	55.0	56.6	57.1	57.2	57.0	55.0	55.0	55.0
37	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
38	55.0	55.0	55.0	55.0	58.1	58.1	56.5	55.4	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	70.7	80.7	81.5	82.5	86.2	86.6	86.6	86.0	83.6	81.0	75.0
D	78.0	84.6	85.3	86.8	89.6	90.1	90.2	90.0	87.8	85.0	79.7
OASPL	87.7	90.3	91.5	93.4	94.0	94.2	94.3	94.3	92.0	87.5	82.9
PNL	86.0	92.6	93.6	94.0	96.9	97.9	97.9	97.5	95.3	92.6	87.7
PNLT	86.0	93.9	93.6	95.2	97.5	98.4	97.9	97.5	95.3	92.6	87.7

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

*With truck*

OCTOBER 28 1976

EVENT 43 9 DEGREE APPROACH MIC. CENTERLINE (HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-7.0	-5.0	-3.0	-1.0	0	1.0	3.0	5.0	7.0
17	74.0	76.8	79.9	80.7	84.5	86.9	86.8	87.5	85.8
18	84.5	86.7	87.3	86.5	84.3	84.2	83.9	87.0	79.9
19	71.2	73.8	76.2	74.7	72.2	80.2	76.7	85.2	82.1
20	69.7	72.8	73.3	78.5	85.6	89.0	85.7	82.3	80.6
21	75.3	74.7	73.6	89.1	91.3	93.0	90.8	76.0	75.7
22	64.0	72.3	81.6	90.6	91.0	93.1	89.3	82.0	71.1
23	74.0	83.7	87.6	91.6	88.0	88.2	86.6	88.1	66.6
24	80.6	86.3	86.3	85.6	79.1	84.7	80.9	89.6	71.6
25	77.9	83.5	78.5	79.7	83.2	87.2	83.7	84.7	73.2
26	75.0	75.3	73.1	81.2	80.1	81.8	79.2	76.8	73.2
27	66.3	74.1	74.3	74.3	79.7	80.3	78.0	76.9	73.3
28	67.5	72.7	69.3	73.8	75.7	77.3	74.2	74.2	70.4
29	62.9	71.1	69.9	73.6	75.6	76.3	73.0	72.1	71.8
30	64.7	69.0	69.3	72.3	74.5	74.6	72.5	68.6	69.6
31	60.8	68.9	67.0	70.6	73.9	73.3	72.8	70.5	69.8
32	60.1	67.3	66.9	71.7	73.9	72.9	69.9	66.8	65.8
33	57.8	64.5	63.7	68.0	70.6	69.9	67.1	64.2	62.1
34	56.1	62.0	61.5	65.5	68.5	68.5	65.5	62.3	60.0
35	55.0	59.5	59.5	62.9	65.2	66.7	63.2	58.9	55.9
36	55.0	55.4	56.4	60.3	62.4	63.6	61.4	57.8	55.3
37	55.3	61.3	61.0	63.6	62.3	62.3	61.0	57.0	55.1
38	55.0	55.4	55.6	56.5	56.8	58.5	55.9	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	56.7	55.1	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	78.2	83.6	83.2	86.6	86.8	88.2	85.0	85.5	78.3
D	84.1	89.4	89.8	93.4	93.3	95.0	92.2	92.1	83.9
OASPL	92.8	94.9	95.3	97.8	98.4	100.0	98.7	97.2	92.1
PNL	91.7	96.8	97.0	100.9	100.7	102.4	99.6	99.8	91.7
PNLT	91.7	98.8	98.7	102.6	100.7	102.4	99.6	99.8	91.7

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

*with truck*

OCTOBER 28 1976

EVENT 49 60 KT. FLY BY MIC. CENTERLINE(HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-10.0	-7.0	-4.0	-1.0	0	.5	2.0	5.0	8.0	11.0
17	66.0	67.2	72.9	76.6	76.5	75.7	77.0	81.6	83.1	78.8
18	78.6	80.0	86.4	87.6	85.3	83.5	80.3	74.1	75.9	70.3
19	68.3	70.5	74.4	72.8	67.6	66.2	67.4	71.1	76.6	72.4
20	69.5	70.6	72.3	66.3	73.3	74.8	78.1	70.4	75.5	73.1
21	75.6	75.2	77.0	77.3	83.1	83.7	84.5	71.8	65.8	66.0
22	66.0	63.4	62.6	75.7	78.5	79.4	77.9	77.9	63.1	58.3
23	65.8	60.8	67.0	83.4	83.3	82.2	74.9	75.3	69.5	56.5
24	58.3	58.6	71.3	77.1	75.1	72.9	73.8	72.8	73.7	60.1
25	62.0	65.3	73.4	69.9	76.5	78.6	78.9	71.8	72.4	61.9
26	65.5	66.5	70.0	76.5	76.9	76.5	77.1	75.6	68.4	64.7
27	65.8	64.6	64.9	75.4	76.4	77.7	76.7	72.1	70.3	64.6
28	62.5	59.1	68.6	73.2	75.2	75.9	76.8	72.4	71.0	62.1
29	57.3	61.1	66.0	73.0	75.7	76.3	76.0	72.2	70.8	66.2
30	60.3	60.5	67.4	72.2	75.7	76.3	75.3	71.5	68.9	62.6
31	57.8	57.5	66.1	72.0	74.1	74.5	74.2	72.3	71.9	64.0
32	57.0	56.5	65.9	71.4	74.0	74.2	71.6	67.7	67.0	60.0
33	55.0	55.1	63.3	68.1	70.3	70.7	68.9	64.8	61.4	55.7
34	55.0	55.0	60.3	65.7	67.6	67.9	67.3	61.8	58.7	55.0
35	55.0	55.0	58.2	62.8	64.6	65.2	64.7	58.2	55.3	55.0
36	55.0	55.0	55.2	59.1	60.5	61.1	61.6	56.1	55.0	55.0
37	55.0	55.0	55.0	55.8	58.4	60.2	61.5	57.2	55.0	55.0
38	55.0	55.0	55.2	57.1	58.1	58.5	56.7	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	69.3	69.7	76.6	82.0	84.1	84.5	83.6	80.6	78.7	71.3
D	77.4	77.5	82.3	87.4	89.1	89.4	88.2	84.7	82.8	77.3
OASPL	83.8	85.4	89.2	93.3	94.3	93.9	93.4	91.7	88.1	82.9
PNL	85.3	85.2	90.7	95.4	96.6	96.7	95.8	92.3	90.5	84.7
PNLT	85.3	85.2	91.7	95.4	96.6	96.7	95.8	92.3	91.8	86.0

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

*With truck*

OCTOBER 28 1976

EVENT 50

60 KT. FLY BY MIC. CENTERLINE (HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-11.0	-8.0	-5.0	-2.0	0	1.0	4.0	7.0	10.0	11.0
17	69.9	71.0	74.7	76.2	74.1	74.3	80.7	83.5	78.6	77.6
18	81.3	82.7	86.2	85.8	81.7	79.6	72.1	75.0	71.9	71.3
19	72.4	73.1	77.9	73.7	65.4	64.9	65.2	76.8	76.1	75.0
20	71.3	70.8	74.2	67.7	76.0	78.4	71.6	74.3	74.7	73.4
21	75.7	75.8	75.1	79.2	84.7	85.1	71.7	62.8	65.7	65.6
22	65.9	62.8	66.9	81.7	80.2	78.3	76.1	67.1	59.3	59.4
23	64.8	58.0	77.6	87.6	81.0	74.9	73.6	70.2	59.4	55.6
24	58.9	65.7	82.0	83.2	71.8	73.5	68.3	72.1	65.3	61.1
25	67.9	70.2	78.7	73.0	78.7	77.6	71.9	70.9	67.2	64.1
26	68.8	70.8	72.7	78.7	75.8	76.6	72.8	67.0	67.2	65.8
27	66.0	66.2	70.1	75.3	77.4	76.8	70.7	71.9	64.1	65.0
28	61.8	62.5	72.3	75.5	75.4	75.8	70.2	69.5	67.0	64.1
29	57.8	65.4	69.4	74.2	76.0	75.3	70.8	70.9	69.1	69.5
30	62.5	60.4	68.9	71.9	76.7	75.3	69.5	68.9	65.1	63.0
31	57.7	59.6	67.1	71.3	74.6	73.9	70.5	71.3	65.5	64.5
32	58.0	59.0	65.5	70.7	72.7	71.4	66.9	65.3	61.7	58.0
33	55.0	55.7	63.3	67.3	69.3	68.5	64.0	60.1	56.6	55.0
34	55.0	55.0	60.1	64.0	66.4	66.3	60.2	56.4	55.0	55.0
35	55.0	55.0	56.9	60.9	63.2	63.0	57.4	55.0	55.0	55.0
36	55.0	55.0	55.0	56.5	59.1	59.3	55.5	55.0	55.0	55.0
37	55.0	55.0	55.0	55.0	57.6	57.3	55.3	55.0	55.0	55.0
38	55.0	55.0	55.0	55.1	55.0	55.0	55.0	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	71.0	72.3	79.9	83.7	84.2	83.5	78.5	77.5	74.0	72.8
D	78.7	79.5	85.8	89.3	88.1	87.6	83.5	82.1	79.2	78.1
OASPL	86.7	88.5	92.1	94.1	93.1	92.2	91.5	88.2	84.6	83.4
PNL	86.1	87.1	93.8	97.5	95.8	95.5	90.4	89.9	86.6	85.9
PNLT	87.7	88.4	93.8	97.5	95.8	95.5	90.4	91.4	87.7	87.9

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE G-III

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 51 6 DEGREE APPROACH MIC.CENTERLINE(HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-7.0	-5.0	-3.0	-1.5	-1.0	0	1.0	3.0	5.0	7.0
17	75.0	76.6	77.9	73.8	75.2	79.1	79.3	83.5	87.2	84.0
18	83.6	85.1	86.6	86.5	86.1	84.7	82.6	79.5	80.6	78.3
19	72.1	72.2	75.0	71.9	71.2	70.8	74.9	72.3	79.7	78.3
20	72.1	73.4	70.9	74.7	78.3	84.0	86.4	82.2	76.5	78.0
21	78.6	76.0	72.3	84.7	86.7	90.0	90.9	84.9	75.7	73.1
22	66.9	67.4	81.3	88.9	89.6	90.6	89.8	86.2	80.9	68.4
23	72.2	78.9	88.3	92.8	92.3	89.8	85.2	83.3	83.7	69.2
24	79.7	83.4	88.4	87.4	85.8	81.3	79.9	76.0	84.4	75.6
25	79.2	82.9	81.2	77.6	79.6	82.9	82.5	78.3	75.1	76.5
26	74.5	76.8	74.8	80.4	80.6	79.4	78.6	74.2	71.5	74.7
27	67.5	68.4	77.1	75.8	75.8	79.2	78.1	76.6	71.5	68.5
28	67.5	70.5	71.3	75.0	75.5	76.1	76.5	73.5	71.3	68.3
29	67.4	64.7	70.8	73.6	74.4	75.7	76.2	73.0	71.0	70.4
30	65.1	65.5	69.8	71.9	73.1	75.2	75.8	72.1	68.9	67.8
31	61.9	62.3	68.8	70.4	71.8	73.3	73.7	73.1	69.4	69.2
32	60.3	61.5	68.2	70.1	72.5	73.5	71.9	69.0	65.5	65.0
33	56.7	58.2	64.0	68.5	69.4	69.0	68.8	67.1	63.1	61.0
34	55.2	55.8	61.9	69.0	69.5	66.8	68.3	65.0	60.3	58.1
35	55.0	55.0	59.0	60.9	62.8	64.2	65.3	62.1	56.9	55.0
36	55.0	55.0	55.6	57.2	58.5	60.2	61.5	59.8	55.3	55.0
37	55.0	55.0	56.6	57.0	57.7	58.5	59.7	59.7	55.0	55.0
38	55.0	55.0	56.9	55.3	55.8	56.2	56.6	55.3	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.4	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	78.5	81.2	84.6	86.8	86.9	86.8	86.0	82.7	81.4	78.0
D	84.5	87.1	91.0	93.5	93.5	93.0	92.3	88.8	87.8	83.8
QASPL	91.3	94.0	96.6	98.4	98.3	98.2	97.9	98.1	94.4	90.5
PNL	91.7	94.0	98.1	100.9	101.1	100.6	99.8	96.7	95.6	91.4
PNLT	91.7	95.4	98.1	102.3	101.1	100.6	99.8	96.7	95.6	91.4

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

*with truck*

OCTOBER 28 1976

EVENT 55 85 KT. FLY BY MIC. CENTERLINE(HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-10.0	-7.5	-5.0	-2.5	.5	0	2.5	5.0	7.5	8.0
17	78.3	79.3	78.5	77.8	72.8	73.1	77.6	82.9	79.7	77.2
18	82.9	82.8	85.5	87.3	85.1	82.7	74.3	72.6	71.6	70.8
19	72.2	71.0	73.0	73.1	68.8	67.3	66.2	69.9	73.1	72.2
20	69.2	68.3	69.8	68.2	73.1	76.2	80.0	68.5	70.9	71.2
21	75.6	74.9	78.6	71.8	83.5	83.9	77.9	64.3	64.0	64.1
22	66.0	65.0	65.2	69.6	79.5	79.7	78.8	72.2	58.4	58.3
23	65.3	63.1	63.5	81.4	84.3	82.8	73.1	72.9	63.9	61.3
24	60.4	57.8	69.2	80.5	75.4	74.0	72.2	72.8	70.5	68.2
25	56.8	63.0	69.3	75.5	77.5	79.3	77.8	65.9	68.7	67.9
26	59.2	67.3	69.7	71.4	78.3	77.7	74.4	70.9	65.5	66.1
27	64.0	66.7	65.8	75.7	75.2	76.4	75.5	69.8	61.6	60.2
28	64.8	63.3	65.5	71.3	73.9	74.7	74.2	69.7	66.5	64.9
29	61.9	59.3	68.3	72.7	75.5	76.6	74.1	68.7	64.6	64.7
30	57.9	62.8	66.8	69.1	74.5	76.1	73.5	66.7	65.2	64.6
31	60.1	59.2	65.1	67.7	73.1	74.4	72.1	67.1	67.1	64.6
32	56.3	57.4	66.8	67.6	72.5	73.5	68.7	64.5	61.4	59.8
33	55.0	55.2	66.0	66.0	71.9	72.0	66.5	59.3	56.4	55.8
34	55.0	55.0	60.6	62.8	68.0	68.0	63.6	56.2	55.0	55.0
35	55.0	55.0	56.4	58.4	62.7	63.5	60.2	55.0	55.0	55.0
36	55.0	55.0	55.0	55.0	58.7	59.5	57.2	55.0	55.0	55.0
37	55.0	55.0	55.0	55.0	56.2	57.5	56.1	55.0	55.0	55.0
38	55.0	55.0	55.0	55.4	55.4	55.7	55.0	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	69.9	70.6	76.1	80.8	83.8	84.4	82.0	76.1	73.3	72.0
D	78.2	78.8	82.6	86.4	89.2	89.3	86.3	81.1	78.8	77.9
OASPL	88.6	91.0	92.1	95.9	94.0	92.8	93.8	89.4	84.3	83.3
PNL	86.3	86.5	90.2	93.7	96.7	96.5	93.5	88.7	86.4	85.2
PNLT	86.3	87.7	90.2	93.7	96.7	96.5	93.5	88.7	87.7	85.2

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0



# TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

*With truck*

OCTOBER 28 1976

EVENT 66 85 KT. FLY BY MIC. CENTERLINE(HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-6.5	-4.5	-2.5	-.5	0	1.5	3.5	5.5	7.5	9.5
17	74.0	77.4	78.5	75.2	75.7	74.5	76.6	82.4	80.5	77.6
18	81.1	84.8	87.9	89.1	88.3	81.2	70.4	71.9	74.1	70.1
19	71.7	74.1	76.8	75.0	72.1	65.6	63.3	71.9	78.3	75.9
20	71.5	72.9	74.8	70.7	74.1	79.5	76.5	69.6	76.9	76.8
21	76.1	80.8	80.3	82.3	86.2	87.4	75.8	60.6	64.7	67.2
22	68.4	68.1	67.0	77.9	79.8	77.8	77.4	70.6	62.3	66.8
23	68.5	68.4	74.0	85.9	86.2	78.1	74.7	72.3	63.8	59.9
24	61.3	60.2	75.2	80.7	78.8	75.3	72.4	74.1	70.8	60.3
25	58.1	66.7	74.4	74.5	77.4	78.6	76.6	69.8	70.8	66.6
26	64.5	70.4	73.1	77.4	78.4	78.4	75.2	71.8	70.2	69.8
27	67.9	70.1	70.2	76.2	76.9	77.7	75.4	73.6	63.9	68.9
28	68.1	64.6	70.6	74.6	75.5	76.5	73.7	70.9	67.1	64.4
29	64.7	63.9	68.6	74.9	76.2	76.7	73.1	71.6	68.0	64.7
30	62.4	65.7	69.7	75.2	76.2	76.6	72.5	69.8	66.2	64.5
31	62.0	61.5	67.6	73.8	74.4	75.7	74.6	69.5	69.1	63.2
32	59.3	59.6	65.7	72.9	73.9	73.7	69.1	65.5	62.0	57.0
33	55.9	56.0	63.3	70.0	70.8	69.9	66.1	60.8	56.7	55.0
34	55.0	55.0	60.8	66.7	67.4	66.8	63.7	57.6	55.0	55.0
35	55.0	55.0	58.4	63.4	64.1	64.1	60.0	55.0	55.0	55.0
36	55.0	55.0	55.3	59.2	59.9	59.8	57.2	55.0	55.0	55.0
37	55.0	55.0	55.0	55.2	55.8	59.2	56.7	55.0	55.0	55.0
38	55.0	55.0	55.5	55.8	56.1	55.8	55.0	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	72.7	73.7	78.7	83.7	84.7	84.8	81.7	78.8	75.3	72.9
D	79.3	81.0	84.5	89.1	90.0	89.3	86.0	82.6	80.6	78.8
OASPL	88.3	91.9	95.5	97.3	96.9	92.9	92.5	87.7	86.1	83.8
PNL	86.7	89.4	92.6	97.4	98.1	97.1	93.2	90.2	88.2	86.6
PNLT	86.7	90.4	92.6	97.4	98.1	97.1	94.5	90.2	89.9	86.6

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

*With truck*

OCTOBER 28 1976

EVENT 67 95 KT. FLY BY MIC. CENTERLINE (HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-4.5	-2.5	-.5	0	1.5	3.5	5.5	7.5	9.5	12.0
17	81.2	81.9	74.7	75.2	79.3	83.0	82.1	80.3	76.7	75.3
18	82.8	88.3	88.9	86.4	78.3	71.8	73.0	71.8	72.6	70.8
19	72.3	76.4	74.6	70.4	67.3	70.5	77.3	77.6	78.0	77.5
20	69.3	74.2	74.6	76.4	81.8	71.2	77.8	78.8	79.5	79.8
21	75.2	78.6	87.1	87.8	84.3	68.7	68.4	69.5	69.7	72.3
22	65.7	68.0	78.8	80.5	79.0	77.4	64.4	68.2	70.2	71.0
23	60.9	76.0	87.7	86.6	74.5	76.3	69.5	59.1	67.1	71.1
24	60.5	74.7	79.7	77.1	77.7	76.0	76.3	64.9	65.2	72.5
25	65.5	74.1	78.5	80.8	80.3	72.8	74.9	69.6	62.3	70.9
26	69.4	72.7	80.2	79.8	79.9	75.7	72.7	72.3	67.0	65.4
27	69.0	71.3	78.2	79.2	79.2	73.9	70.6	70.9	68.9	63.3
28	61.5	72.3	76.5	78.6	79.4	73.6	73.4	66.5	68.0	65.1
29	65.5	70.2	76.0	77.5	78.7	73.6	70.8	68.9	64.3	66.4
30	63.6	70.4	76.1	77.7	77.6	72.2	70.8	67.2	62.4	64.6
31	61.9	68.1	74.4	76.3	76.8	72.6	71.7	69.0	65.6	63.7
32	58.9	67.1	74.4	76.0	74.9	68.7	66.8	63.5	58.2	55.8
33	55.8	63.8	70.7	71.7	71.9	64.3	61.1	57.5	55.0	55.0
34	55.3	62.4	68.7	69.5	69.4	61.5	57.2	55.6	55.0	55.0
35	55.0	59.8	65.6	66.5	66.0	57.7	55.0	55.0	55.0	55.0
36	55.0	56.1	61.7	62.6	62.9	55.3	55.0	55.0	55.0	55.0
37	55.0	55.0	57.3	58.9	59.8	55.0	55.0	55.0	55.0	55.0
38	55.0	57.0	57.9	58.7	56.9	55.0	55.0	55.0	55.0	55.0
39	55.0	55.0	55.0	55.2	55.2	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	72.8	79.3	85.9	86.5	86.4	81.3	79.3	75.9	73.0	73.8
D	80.6	85.6	91.3	91.7	90.7	85.1	83.8	80.7	79.4	80.3
OASPL	93.0	96.9	97.7	96.6	94.0	89.6	87.4	85.5	84.5	84.4
PNL	87.3	93.2	99.1	99.2	97.8	92.6	91.1	89.0	88.0	88.5
PNLT	87.3	93.2	99.1	99.2	97.8	92.6	91.1	90.2	89.8	88.5

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 68 95 KT. FLY BY MIC. CENTERLINE(HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-7.0	-5.0	-3.0	-1.0	0	1.0	3.0	5.0	7.0	8.5
17	84.0	87.2	87.2	76.0	70.7	76.0	79.8	84.0	81.8	78.5
18	83.5	86.3	89.7	87.8	83.0	79.0	71.0	72.7	72.2	72.2
19	75.1	77.4	79.4	72.0	67.3	68.9	66.7	73.9	76.3	75.3
20	72.4	72.7	72.6	70.4	76.1	77.6	74.9	73.2	74.8	76.5
21	73.8	77.7	75.6	83.9	85.7	83.7	72.5	61.7	61.6	69.8
22	66.6	69.3	68.7	79.4	80.4	78.7	79.2	66.1	63.9	66.5
23	65.7	64.0	79.9	86.6	84.2	76.6	76.2	72.2	61.0	60.6
24	60.3	61.3	81.1	80.0	74.9	76.1	73.3	74.2	68.7	60.3
25	56.6	67.0	80.4	77.0	80.6	79.5	76.3	71.8	72.5	67.7
26	62.5	71.0	76.0	78.2	79.0	79.5	77.1	68.3	72.5	71.3
27	66.7	70.5	73.3	75.5	79.6	80.1	75.1	71.5	67.8	70.3
28	67.2	64.4	74.6	74.9	77.5	79.0	74.0	69.8	66.9	67.0
29	62.0	65.4	70.7	75.3	78.6	78.3	74.1	69.8	69.9	66.4
30	63.5	64.6	69.1	74.9	78.0	78.6	73.1	67.7	67.0	63.9
31	62.9	63.5	68.4	73.6	76.5	77.1	73.2	69.1	67.5	64.6
32	58.2	60.9	66.5	72.4	75.0	74.3	69.3	66.0	64.1	60.1
33	55.1	57.6	63.4	69.4	71.7	71.6	66.1	61.0	58.7	55.6
34	55.0	55.1	61.7	66.6	68.4	68.5	63.4	57.4	55.3	55.0
35	55.0	55.0	58.4	63.3	65.4	65.4	59.4	55.1	55.0	55.0
36	55.0	55.0	55.4	59.3	61.5	61.5	56.4	55.0	55.0	55.0
37	55.0	55.0	55.0	55.6	59.4	60.0	55.3	55.0	55.0	55.0
38	55.0	55.0	55.9	57.6	58.0	56.1	55.0	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	71.7	74.4	81.5	84.2	86.5	86.2	81.9	77.5	76.3	74.2
D	80.1	82.8	88.0	89.8	90.8	90.2	86.2	82.4	81.0	79.6
OASPL	91.7	95.8	99.1	97.8	94.6	92.8	92.0	87.6	85.5	84.0
PNL	87.5	90.1	94.8	97.8	97.9	97.3	93.5	89.6	88.9	87.6
PNLT	87.5	90.1	94.8	97.8	97.9	97.3	93.5	89.6	88.9	87.6

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

*With truck*

OCTOBER 28 1976

EVENT 69 95 KT. FLY BY MIC. CENTERLINE (HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-4.5	-3.5	-2.5	-1.5	-.5	0	.5	1.5	2.5	5.0
17	80.7	79.0	77.9	74.9	73.8	73.8	76.4	79.6	77.2	82.6
18	85.3	86.4	88.4	89.6	87.2	83.9	80.5	76.3	69.9	71.7
19	74.3	75.4	75.8	74.9	70.0	67.6	67.5	66.3	66.0	73.7
20	71.9	73.0	72.1	68.6	75.3	77.6	78.8	81.2	76.8	74.7
21	77.0	77.3	74.2	81.1	86.4	87.0	85.9	80.6	74.9	62.8
22	66.3	65.8	66.9	74.3	80.0	80.6	80.1	80.7	79.0	61.6
23	60.7	67.3	80.1	86.3	86.3	84.1	81.1	74.2	75.6	69.1
24	62.0	70.1	76.8	80.4	77.6	75.3	76.0	76.1	72.9	73.4
25	66.4	70.9	73.8	73.4	80.3	80.8	80.0	79.7	76.6	72.6
26	69.0	70.2	69.8	78.9	80.3	79.4	78.7	78.4	75.9	68.8
27	68.0	65.5	73.7	78.0	80.3	80.8	80.1	79.2	74.8	71.2
28	62.9	67.7	70.8	75.1	77.8	78.1	78.2	77.6	73.4	68.9
29	65.2	65.8	70.6	74.9	77.8	78.3	78.1	76.9	73.5	68.6
30	64.1	65.9	70.2	74.5	77.8	78.2	78.3	77.6	72.8	66.5
31	63.1	63.6	68.4	73.0	76.2	76.5	77.0	77.9	75.3	67.0
32	60.3	61.5	66.3	72.4	75.2	75.5	75.3	74.0	70.1	62.4
33	56.7	58.4	62.6	68.4	71.4	72.1	71.8	71.3	66.6	57.8
34	56.1	57.7	63.4	67.2	68.9	69.6	69.6	69.5	64.7	55.5
35	55.0	55.4	60.6	64.0	65.8	66.8	67.0	65.4	60.4	55.0
36	55.0	55.0	56.2	58.9	62.0	62.9	63.1	61.5	57.0	55.0
37	55.0	55.0	55.0	55.4	57.8	59.0	59.8	58.8	55.3	55.0
38	55.0	55.0	57.9	58.8	58.0	58.4	58.5	56.4	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	72.8	74.9	79.5	83.9	86.5	86.6	86.3	85.9	82.5	76.2
D	80.7	82.2	85.8	89.5	91.8	91.6	90.9	90.2	86.9	81.2
OASPL	93.0	94.3	96.5	97.5	96.1	94.7	93.3	92.0	89.8	86.0
PNL	88.8	90.2	93.1	97.5	98.9	98.4	98.0	97.0	93.7	88.6
PNLT	88.8	90.2	93.1	98.1	98.9	98.4	98.0	97.0	94.9	88.6

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

*With truck*

OCTOBER 28 1976

EVENT 70 3 DEGREE APPROACH MIC. CENTERLINE(HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-8.5	-6.5	-4.5	-2.5	-.5	0	1.5	3.5	5.5	7.5
17	73.2	74.4	76.2	77.0	81.7	82.4	81.8	84.7	87.3	85.9
18	85.7	86.3	88.0	88.7	87.7	85.8	81.9	77.3	78.9	76.4
19	74.3	75.7	79.1	77.1	70.2	68.9	74.0	71.3	78.4	80.8
20	73.7	75.4	76.0	71.6	80.9	83.0	81.2	77.1	75.7	78.2
21	79.3	81.2	78.9	75.5	90.0	91.2	87.0	77.5	64.8	71.5
22	73.5	72.0	68.3	84.3	91.5	91.3	83.8	82.3	71.3	63.6
23	70.3	69.0	78.2	88.8	89.2	88.0	77.1	81.0	75.1	65.2
24	70.0	78.1	83.7	86.6	82.4	81.5	78.7	75.3	77.1	71.7
25	74.1	79.4	82.8	78.8	85.0	85.9	81.7	76.1	74.4	73.0
26	77.0	77.8	79.0	78.6	83.0	82.2	80.6	77.5	71.9	70.8
27	72.9	74.9	70.6	79.0	82.4	83.1	79.3	74.9	74.7	65.6
28	66.1	68.2	73.7	72.6	77.8	79.5	78.7	73.8	71.9	70.1
29	65.9	71.4	69.5	72.7	76.8	77.7	77.3	74.5	73.7	70.9
30	65.8	66.3	69.8	71.7	76.3	77.5	76.6	73.0	71.9	70.7
31	61.7	64.8	67.8	69.6	74.8	75.5	76.0	76.2	74.7	70.9
32	59.0	62.4	65.8	69.1	73.3	73.7	73.6	69.9	69.1	66.8
33	56.7	59.3	62.4	65.5	70.4	70.7	70.0	67.9	65.2	61.9
34	55.2	56.8	59.7	62.6	67.3	67.9	68.7	64.7	61.0	56.7
35	55.0	55.5	57.3	59.6	64.5	65.4	66.3	60.8	56.3	55.0
36	55.0	55.0	55.0	56.2	61.1	61.7	62.8	58.5	55.0	55.0
37	55.0	55.0	55.0	59.2	59.7	61.0	63.0	59.9	55.4	55.0
38	55.0	55.0	56.2	60.2	57.4	58.3	59.2	55.3	55.0	55.0
39	55.0	55.0	55.0	55.0	55.4	56.0	58.5	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.2	55.4	55.4	55.0	55.0	55.0
A	77.0	79.9	82.6	84.9	87.9	88.2	85.9	83.1	81.4	78.4
D	83.1	85.5	88.4	91.3	93.8	93.9	91.0	88.2	85.7	82.9
OASPL	90.9	92.3	95.0	97.8	99.2	99.2	99.3	96.2	91.9	89.5
PNL	91.3	93.0	95.5	98.5	101.2	101.4	98.3	95.2	93.2	90.5
PNLT	91.3	94.4	96.7	99.0	101.2	101.4	98.3	96.8	94.6	90.5

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 67 95 KT. FLY BY MIC. CENTERLINE(SOFT)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-4.0	-2.5	-1.0	0	.5	2.0	3.5	5.0	6.5	8.0
17	79.9	80.0	77.5	75.2	74.6	79.1	78.4	80.3	79.0	77.8
18	82.7	86.3	89.5	88.9	86.8	79.4	69.6	71.5	70.6	71.0
19	72.0	75.0	75.3	72.3	68.8	66.5	68.0	73.6	75.5	75.6
20	66.9	69.3	66.9	74.8	78.4	80.7	73.2	72.2	75.5	77.1
21	70.6	72.2	80.8	86.8	89.2	85.7	74.0	62.7	65.4	67.0
22	60.2	64.7	74.3	78.9	79.8	80.6	77.8	68.7	61.6	65.1
23	66.5	74.8	85.6	86.6	84.8	75.7	77.4	73.7	67.9	60.3
24	66.5	74.7	80.2	77.3	75.4	76.8	74.0	76.2	73.3	66.1
25	66.7	73.6	74.8	79.3	80.9	80.0	73.6	73.3	73.5	68.6
26	67.5	69.3	79.3	81.0	79.5	77.3	76.4	70.9	73.3	69.8
27	62.0	70.4	78.9	79.4	79.7	78.3	74.4	73.6	67.4	67.2
28	62.1	71.2	75.1	77.6	78.5	77.3	73.4	72.0	72.1	64.9
29	62.6	67.3	73.4	76.7	77.5	76.5	73.2	72.5	68.4	66.4
30	59.5	68.6	73.5	76.3	77.2	75.9	71.8	71.0	68.2	62.7
31	58.3	65.7	71.4	74.6	75.7	76.6	72.0	70.8	67.7	65.0
32	56.8	64.1	70.2	73.5	74.4	72.6	68.2	67.1	62.6	57.8
33	55.0	60.1	66.7	70.3	71.0	69.2	64.4	62.1	56.7	55.0
34	55.0	58.4	64.1	66.6	67.7	66.2	61.4	58.7	55.0	55.0
35	55.0	55.5	60.7	63.1	64.4	63.1	57.6	55.0	55.0	55.0
36	55.0	55.0	57.0	59.7	60.4	60.1	55.3	55.0	55.0	55.0
37	55.0	55.0	55.0	55.5	56.7	56.8	55.0	55.0	55.0	55.0
38	55.0	55.0	58.0	56.7	56.4	55.0	55.0	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	70.3	77.5	83.5	85.8	86.3	84.6	80.9	79.4	77.0	72.8
D	73.5	83.0	89.0	90.8	90.9	89.0	85.0	83.4	81.4	78.2
OASPL	91.1	94.5	97.2	96.8	95.9	92.1	89.5	87.3	85.6	83.6
PNL	86.5	91.0	96.8	98.5	98.6	96.6	92.7	90.9	89.4	86.9
PNLT	86.5	91.0	96.8	98.5	98.6	96.6	92.7	90.9	90.8	88.5

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 68 95 KT. FLY BY MIC. CENTERLINE(SOFT)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-5.5	-3.5	-1.5	0	.5	2.5	4.5	6.5	8.5
17	85.1	86.4	77.1	72.4	73.4	75.9	80.9	77.5	75.0
18	84.2	86.6	87.7	83.8	81.3	68.9	71.5	68.4	69.8
19	74.6	77.2	73.8	67.8	68.4	61.7	69.3	74.0	73.8
20	69.6	71.1	67.7	76.8	79.1	76.5	67.7	71.9	75.0
21	70.2	72.4	81.7	88.0	88.5	76.1	61.2	61.8	64.2
22	61.4	67.5	77.9	79.6	79.3	77.0	70.9	59.4	61.7
23	62.3	80.0	86.3	83.1	79.3	73.9	72.9	66.3	59.1
24	64.8	79.2	81.0	74.8	75.9	72.9	72.9	71.4	65.5
25	66.0	79.2	75.5	79.9	79.3	76.8	67.7	72.3	68.7
26	67.7	74.4	78.0	78.4	78.0	75.1	71.7	71.0	70.9
27	65.3	73.4	76.0	79.6	79.4	76.8	71.6	65.2	66.6
28	61.5	74.0	73.1	77.6	78.0	75.1	67.8	69.0	62.4
29	63.1	68.9	72.2	77.1	77.7	74.0	69.3	64.8	65.5
30	61.5	69.1	72.4	76.5	77.1	72.8	68.0	65.6	63.7
31	60.2	66.3	71.4	75.1	75.4	71.7	67.4	65.8	63.7
32	57.5	64.9	69.8	73.6	73.6	68.3	64.1	60.9	58.0
33	55.1	60.9	66.5	69.6	69.5	64.8	59.4	55.7	55.0
34	55.0	58.5	63.6	66.7	67.0	62.5	56.1	55.0	55.0
35	55.0	55.4	60.6	63.2	63.3	58.7	55.0	55.0	55.0
36	55.0	55.0	56.4	58.9	59.3	55.9	55.0	55.0	55.0
37	55.0	55.0	55.0	56.6	57.2	55.2	55.0	55.0	55.0
38	55.0	55.0	55.0	55.1	55.1	55.0	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	70.9	80.3	82.9	85.3	85.3	81.3	76.5	74.7	72.5
D	79.7	86.1	88.8	89.8	89.4	85.4	80.8	79.3	77.7
OASPL	92.9	97.0	97.7	94.9	93.3	91.4	86.9	83.8	81.9
PNL	87.6	93.4	96.7	97.6	97.6	93.1	88.8	87.5	86.6
PNLT	87.6	93.4	96.7	97.6	97.6	93.1	88.8	88.8	86.6

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 69 95 KT. FLY BY MIC. CENTERLINE (SOFT)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-4.5	-3.0	-1.5	0	1.5	3.0	4.5	6.0	8.0
17	79.6	78.0	75.2	74.0	78.3	77.1	81.0	79.2	77.1
18	84.8	86.3	89.3	85.2	76.6	68.9	69.8	71.0	71.1
19	73.6	74.9	74.0	68.4	65.4	65.5	70.8	73.8	75.6
20	68.1	69.0	67.6	79.2	79.9	70.8	69.9	73.4	75.6
21	69.8	71.0	82.6	89.2	81.8	73.0	62.2	62.0	65.9
22	60.1	64.1	75.4	80.3	79.5	78.0	69.7	61.3	63.2
23	67.1	76.2	85.5	82.5	74.1	75.6	71.8	66.0	60.2
24	67.1	75.4	78.2	75.2	76.2	72.2	73.6	72.6	65.6
25	67.3	73.0	74.9	80.6	79.2	72.2	70.3	73.0	68.5
26	66.4	67.1	80.2	79.2	77.4	75.1	68.7	71.0	69.3
27	61.7	67.3	77.4	79.9	77.6	72.0	70.7	66.3	66.1
28	63.0	66.3	74.8	78.1	76.1	71.4	67.1	69.0	62.1
29	61.3	65.1	72.4	78.1	76.1	71.4	67.5	65.3	64.6
30	60.4	65.5	73.4	77.4	75.1	70.4	66.3	66.5	61.8
31	58.8	63.8	70.7	75.8	76.2	71.6	65.6	67.5	62.8
32	56.9	61.7	69.4	74.4	71.3	67.3	61.7	60.7	56.4
33	55.0	58.5	66.4	70.7	68.0	63.8	57.1	55.8	55.0
34	55.0	57.6	64.1	67.9	65.3	61.5	55.3	55.0	55.0
35	55.0	55.7	61.1	64.2	62.0	57.2	55.0	55.0	55.0
36	55.0	55.0	56.8	60.3	58.1	55.1	55.0	55.0	55.0
37	55.0	55.0	55.0	56.9	55.7	55.0	55.0	55.0	55.0
38	55.0	55.0	55.6	55.9	55.0	55.0	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	70.4	75.5	83.4	86.2	83.7	79.9	75.4	75.3	71.7
D	79.0	82.8	88.8	90.7	88.0	84.3	80.0	80.0	77.4
OASPL	91.5	94.2	96.7	95.0	90.6	88.0	85.4	84.2	82.4
PNL	87.5	90.2	96.6	98.5	95.4	91.5	88.3	88.0	86.2
PNLT	87.5	90.2	96.6	98.5	96.4	91.5	88.3	89.3	87.4

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0



TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 80 105 KT. FLY BY MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-6.5	-5.0	-3.5	-2.0	-0.5	0	1.0	2.5	4.0	5.5
17	79.0	80.4	79.8	77.0	76.5	77.1	82.7	84.5	74.3	74.8
18	82.3	84.8	88.1	88.4	87.0	88.0	87.7	78.5	72.2	70.5
19	73.7	76.7	78.5	78.1	76.1	75.8	74.9	74.5	75.5	73.1
20	71.8	75.0	75.6	76.6	73.6	70.6	68.9	72.4	73.4	74.5
21	76.1	78.0	79.9	77.8	69.3	68.1	68.4	64.8	63.7	65.8
22	68.0	68.5	69.0	66.0	72.1	73.9	76.9	74.5	66.1	60.2
23	65.7	62.3	60.9	72.2	79.4	80.1	80.5	80.6	71.5	62.6
24	59.0	59.6	67.5	79.2	82.2	82.4	83.5	80.4	74.8	67.0
25	56.0	63.6	71.8	79.1	81.4	79.1	76.8	75.4	75.4	70.6
26	62.3	67.4	74.4	76.9	76.7	79.8	81.1	79.5	70.6	70.8
27	64.6	67.1	68.6	73.1	82.0	83.5	82.5	80.5	73.6	66.8
28	63.4	62.8	67.1	76.5	76.7	77.6	79.6	76.1	72.9	67.3
29	59.9	63.8	71.3	75.3	77.4	78.0	77.8	75.3	71.7	67.3
30	60.5	66.1	68.2	76.1	77.1	78.5	77.8	74.0	68.6	64.3
31	58.1	61.8	67.4	73.3	76.2	77.0	76.5	73.4	68.1	62.5
32	57.0	60.2	65.2	71.1	73.6	74.0	72.5	69.8	64.0	60.1
33	55.0	57.4	61.6	67.0	70.4	71.0	69.8	66.1	61.2	55.6
34	55.0	55.8	60.1	64.6	66.1	66.9	65.7	61.5	57.0	55.0
35	55.0	55.0	56.2	60.1	62.3	63.2	62.1	57.1	55.0	55.0
36	55.0	55.0	55.0	56.4	57.9	58.7	58.0	55.0	55.0	55.0
37	55.0	55.0	55.0	55.0	55.8	56.3	56.0	55.0	55.0	55.0
38	55.0	55.0	55.4	55.8	55.9	55.1	55.0	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	69.6	72.9	77.8	83.7	85.8	86.7	86.5	83.6	78.8	73.3
D	78.3	80.2	83.7	87.9	90.0	90.3	90.4	87.9	82.8	79.0
OASPL	88.1	89.8	91.4	91.4	92.1	92.7	93.2	91.3	87.1	83.4
PNL	86.3	88.7	91.9	94.9	97.3	98.1	97.7	95.4	90.3	87.1
PNLT	86.3	89.7	93.2	94.9	97.3	98.1	97.7	95.4	90.3	87.1

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

*Without truck*

OCTOBER 28 1976

EVENT 81 105 KT. FLY BY MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-6.5	-5.0	-3.5	-2.0	-.5	0	1.0	2.5	4.0	6.5
17	78.9	79.4	78.0	75.0	78.8	81.3	84.6	83.2	72.7	76.6
18	83.4	87.0	89.4	88.5	88.4	88.7	85.3	74.6	71.7	69.5
19	74.5	77.3	77.6	76.9	74.9	74.2	72.6	73.9	72.3	74.3
20	72.5	74.6	75.6	74.4	72.0	69.8	67.5	73.6	73.6	73.4
21	79.7	83.6	82.9	74.1	68.9	69.7	68.3	64.8	63.5	66.5
22	69.7	72.0	70.0	67.1	74.8	76.5	78.8	71.6	61.4	62.9
23	68.1	66.3	64.2	75.4	80.3	80.6	80.2	78.5	70.3	56.9
24	61.9	62.7	74.8	79.5	82.7	83.2	82.1	78.6	72.5	61.0
25	57.3	66.9	74.7	79.7	78.0	76.5	74.7	75.2	74.7	67.1
26	64.4	70.5	78.3	76.3	79.3	82.2	82.4	76.7	69.2	70.0
27	66.2	69.9	73.6	78.1	82.6	83.2	81.0	80.9	73.9	67.7
28	65.3	67.4	73.1	77.8	78.5	80.1	79.5	75.9	72.7	63.9
29	62.5	66.2	75.3	77.3	78.6	79.6	77.0	76.2	70.8	67.4
30	62.7	70.1	72.8	76.2	79.1	79.6	75.9	74.4	68.7	62.6
31	62.1	64.1	70.7	74.5	77.3	78.7	76.3	73.8	68.6	63.3
32	58.6	63.4	68.9	72.5	74.1	75.0	72.5	69.5	64.4	60.3
33	56.3	59.4	65.6	68.9	70.7	71.6	68.9	65.6	60.9	56.1
34	55.1	58.6	64.4	65.1	67.1	67.6	64.8	61.8	56.8	55.0
35	55.0	55.6	59.2	60.6	63.6	63.9	60.6	56.1	55.0	55.0
36	55.0	55.0	55.4	56.8	58.9	59.2	56.6	55.0	55.0	55.0
37	55.0	55.0	55.0	55.0	56.5	56.5	55.2	55.0	55.0	55.0
38	55.0	55.0	55.4	57.0	55.2	55.2	55.0	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	71.8	76.2	81.7	84.3	86.6	87.7	86.0	83.5	78.4	73.0
D	80.0	83.0	86.8	88.4	90.5	91.4	89.9	87.0	82.4	78.1
OASPL	89.1	91.2	92.0	91.4	92.6	93.1	92.3	89.6	85.2	82.0
PNL	83.4	91.6	94.3	95.5	97.9	98.6	97.3	95.1	89.8	86.4
PNLT	88.4	93.2	94.3	95.5	97.9	98.6	97.3	95.1	89.8	87.8

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 80 105 KT. FLY BY MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-7.0	-5.0	-3.0	-1.0	0	.5	1.0	3.0	5.0	7.0
17	82.6	84.6	79.6	75.5	78.0	80.1	82.4	81.5	78.6	77.0
18	81.4	84.3	87.9	88.5	88.1	87.6	86.3	73.9	70.1	69.1
19	71.6	73.8	76.9	74.8	72.8	73.0	74.8	72.9	72.8	72.3
20	67.9	72.8	73.8	75.2	73.8	73.1	71.8	76.2	76.0	72.6
21	74.4	77.7	73.9	70.2	65.9	65.0	65.0	65.9	64.7	67.5
22	66.4	67.3	66.9	67.1	72.0	73.2	74.2	65.1	58.7	67.0
23	58.7	65.5	63.1	74.7	76.4	77.1	77.2	72.6	60.2	59.1
24	59.4	60.6	71.7	78.7	80.2	80.6	80.3	76.8	68.1	57.9
25	58.3	65.7	76.7	79.1	78.6	77.7	76.4	75.2	70.3	64.5
26	60.4	72.8	78.7	74.4	76.3	77.8	77.4	70.0	69.3	69.1
27	62.8	74.3	74.2	76.8	79.9	80.2	79.0	75.8	62.6	66.2
28	63.0	70.1	72.0	75.7	74.8	74.8	74.2	71.2	66.4	60.0
29	60.2	66.0	74.6	75.2	76.2	75.7	74.6	72.2	63.3	62.8
30	59.5	70.5	73.4	73.3	75.8	75.6	74.5	69.3	62.6	61.6
31	59.6	65.4	71.1	71.5	73.3	73.5	72.4	68.6	60.4	60.9
32	55.9	63.4	69.8	69.3	70.9	70.9	69.8	65.6	58.2	57.7
33	55.0	58.2	65.6	66.9	69.3	68.8	67.8	62.1	55.1	55.0
34	55.0	55.2	63.2	63.2	64.2	63.6	62.3	57.4	55.0	55.0
35	55.0	55.3	59.1	59.2	60.7	60.3	58.9	55.0	55.0	55.0
36	55.0	55.0	55.3	55.8	56.5	56.1	55.2	55.0	55.0	55.0
37	55.0	55.0	55.0	55.0	55.4	55.3	55.1	55.0	55.0	55.0
38	55.0	55.0	55.3	55.5	55.0	55.0	55.0	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	68.9	77.2	81.8	82.3	83.8	83.9	82.8	79.0	72.1	70.6
D	78.0	82.5	86.2	86.9	88.4	88.4	87.2	83.3	78.0	76.6
OASPL	89.8	93.1	94.7	94.3	93.4	92.9	91.9	86.9	82.7	80.8
PNL	85.5	90.2	93.9	94.2	95.5	95.6	94.9	91.4	86.2	85.5
PNLT	85.5	91.8	93.9	94.2	95.5	95.6	94.9	91.4	87.3	85.5

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE G-VII

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

*Without truck*

OCTOBER 28 1976

EVENT 81 105 KT. FLY BY MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-7.5	-5.5	-3.5	-1.5	0	.5	2.5	4.5	6.5	7.5
17	80.1	81.1	78.2	78.0	79.9	81.2	82.5	78.9	79.3	78.3
18	80.7	83.1	88.1	88.9	87.9	86.7	74.7	72.7	70.3	68.9
19	70.1	72.9	75.4	75.0	72.9	71.4	75.8	74.7	75.5	72.0
20	67.5	70.9	73.2	74.0	68.5	68.2	75.7	76.6	73.7	70.8
21	74.1	77.2	73.2	67.8	65.6	65.6	64.9	65.9	67.3	66.0
22	64.8	65.3	64.2	67.8	72.5	73.0	69.2	60.4	66.1	66.7
23	58.6	59.9	61.1	75.7	76.8	76.0	74.9	65.5	58.2	59.8
24	55.7	58.9	67.3	77.4	78.0	77.5	77.6	70.9	59.1	55.7
25	56.6	61.5	73.3	77.0	72.9	71.8	75.4	72.1	65.6	57.5
26	56.2	64.1	76.3	73.1	77.1	76.6	72.0	69.6	69.1	64.2
27	57.1	63.4	73.9	77.8	78.5	77.6	78.0	66.1	68.1	66.3
28	56.8	61.2	69.8	73.2	74.6	74.6	72.4	69.3	63.9	65.3
29	55.6	56.6	71.7	74.9	73.6	73.4	73.5	66.1	66.2	59.5
30	55.0	61.0	71.6	73.5	73.7	73.1	70.6	65.9	63.7	61.1
31	56.3	57.7	68.5	71.0	72.7	71.9	70.2	65.6	63.6	59.7
32	55.0	55.7	66.5	69.7	69.9	68.7	66.4	61.8	59.1	56.7
33	55.0	55.0	63.4	66.5	67.1	66.4	63.6	57.3	55.8	55.0
34	55.0	55.0	63.7	62.8	63.1	62.2	58.2	55.0	55.0	55.0
35	55.0	55.0	58.9	59.6	59.3	58.2	55.0	55.0	55.0	55.0
36	55.0	55.0	55.6	55.7	55.8	55.3	55.0	55.0	55.0	55.0
37	55.0	55.0	55.0	56.0	55.4	55.2	55.0	55.0	55.0	55.0
38	55.0	55.0	57.1	57.6	55.0	55.0	55.0	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	65.1	69.1	79.4	81.9	82.8	82.2	80.8	74.7	72.6	69.5
D	76.6	78.9	84.3	86.6	86.9	86.2	84.9	79.7	77.6	75.8
OASPL	89.0	91.5	93.2	94.0	93.1	91.7	87.8	83.8	82.7	81.0
PNL	84.0	86.5	92.3	94.1	94.3	93.6	92.8	87.9	86.3	84.2
PNLT	84.0	87.8	92.3	94.1	94.3	93.6	92.8	89.0	86.3	84.2

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

*without truck*

OCTOBER 28 1976

EVENT 74 6 DEGREE APPROACH MIC. CENTERLINE(HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-11.5	-9.0	-6.5	-4.0	-1.5	0	1.0	3.5	6.0	6.5
17	70.2	73.5	74.1	75.4	77.6	76.1	79.3	81.3	84.9	84.2
18	83.3	87.0	87.5	88.0	86.3	83.4	82.9	77.8	77.8	77.2
19	68.6	73.4	74.1	75.9	71.5	73.9	75.6	70.6	75.6	75.6
20	69.4	72.0	75.8	72.0	80.8	83.9	84.9	81.5	75.1	76.1
21	78.3	81.5	79.8	73.5	87.8	90.3	89.5	83.9	69.1	68.8
22	64.5	67.1	65.8	84.4	90.3	87.4	85.5	84.0	75.4	70.1
23	70.5	69.6	74.5	89.9	89.8	83.3	79.9	82.2	78.4	75.4
24	62.8	74.2	80.4	86.3	83.5	76.8	79.1	77.1	78.6	75.5
25	71.5	75.5	79.8	81.2	81.0	81.7	79.8	79.3	76.9	74.7
26	72.4	76.9	75.4	76.0	82.5	78.7	79.1	77.0	69.4	65.8
27	71.6	75.0	69.0	77.6	77.1	78.1	77.6	75.1	72.6	63.8
28	63.9	65.9	71.4	72.6	74.6	75.0	75.5	72.9	68.4	68.2
29	63.3	69.0	67.9	73.5	74.2	75.2	74.8	72.9	68.6	67.0
30	62.2	65.3	68.9	71.3	73.3	74.8	73.8	70.8	66.2	65.4
31	58.9	64.7	66.0	69.1	71.6	72.3	72.1	73.0	67.7	67.5
32	57.1	63.5	64.7	70.8	71.2	71.4	70.8	68.4	63.6	63.2
33	55.6	59.0	61.4	65.9	67.2	68.2	68.7	65.4	60.8	60.5
34	55.0	55.3	58.5	63.5	64.7	66.7	66.3	63.7	57.3	56.7
35	55.0	55.0	56.3	60.7	62.8	63.8	64.1	60.5	55.0	55.0
36	55.0	55.0	55.0	56.9	59.6	61.2	62.0	58.9	55.0	55.0
37	55.0	55.0	57.7	64.6	59.1	60.5	61.5	56.9	55.0	55.0
38	55.0	55.0	55.0	58.3	55.6	56.3	57.6	55.1	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.5	56.7	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	74.3	78.3	79.7	85.1	86.0	84.9	84.2	82.6	78.5	76.8
D	80.8	83.7	85.8	91.7	92.5	91.4	90.4	88.3	84.2	82.6
OASPL	89.8	93.5	94.9	97.6	98.9	96.6	95.5	93.6	90.4	89.3
PNL	88.1	91.8	93.3	99.0	100.1	98.8	98.4	95.6	92.0	90.2
PNLT	88.1	92.9	93.3	101.3	100.1	98.8	98.4	96.7	92.0	91.3

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 76 85 KT. FLY BY MIC. CENTERLINE(HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-5.5	-4.5	-3.5	-2.5	-1.5	-1.0	-.5	0	.5	1.5	4.5
17	80.4	80.6	80.8	80.8	78.3	76.6	76.2	76.1	75.5	77.9	77.8
18	85.6	86.7	88.2	89.4	90.1	89.4	88.0	86.0	84.3	80.8	70.2
19	74.0	74.9	76.2	76.3	75.1	73.7	71.0	68.3	68.0	68.3	69.5
20	70.6	70.9	72.4	73.1	69.8	69.9	73.6	76.1	79.0	80.9	66.6
21	81.5	81.2	81.6	78.5	79.5	83.1	86.9	87.9	88.4	86.2	66.2
22	68.5	68.1	68.0	68.9	76.9	79.3	81.1	82.0	82.3	79.5	73.0
23	68.0	64.1	73.1	81.0	87.3	88.8	89.0	87.6	84.9	75.9	72.2
24	67.3	77.8	80.1	83.0	83.2	81.5	79.7	76.5	75.6	76.1	71.9
25	71.5	78.7	81.7	83.0	79.5	77.9	80.1	81.4	81.6	79.8	67.2
26	69.6	75.9	79.1	79.6	81.1	82.4	82.7	81.6	80.9	79.6	73.1
27	66.1	71.8	73.7	81.2	82.4	81.3	80.7	80.9	81.2	78.9	70.2
28	59.4	66.9	75.1	80.2	78.5	78.5	79.0	79.4	79.8	78.7	69.6
29	60.9	69.4	71.2	77.7	77.4	76.9	78.0	78.8	79.3	77.9	68.8
30	60.8	66.4	73.3	77.4	76.6	76.2	77.0	78.0	79.0	77.8	67.8
31	59.6	66.6	69.4	74.1	74.7	74.9	75.7	76.4	77.5	77.5	70.4
32	57.8	66.2	68.7	74.9	75.7	74.4	75.1	75.8	76.1	78.7	65.2
33	56.2	62.6	65.5	68.3	69.9	70.3	71.9	73.0	73.2	71.5	61.1
34	55.0	58.1	61.8	65.1	67.7	68.2	68.3	68.9	69.1	67.9	58.0
35	55.0	55.4	59.3	62.2	65.0	65.5	65.7	65.8	66.0	65.8	55.3
36	55.0	55.0	56.2	58.0	60.4	61.2	61.5	62.4	62.9	62.3	55.0
37	55.0	55.0	55.0	55.5	58.1	58.4	58.2	60.3	61.4	61.1	55.0
38	55.0	55.0	55.3	60.2	63.6	62.5	59.6	58.3	57.2	56.6	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.1	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	72.9	79.3	82.6	86.6	86.8	86.7	87.3	87.3	87.3	86.5	77.2
D	81.6	85.1	87.9	91.1	91.8	91.9	92.3	92.2	91.9	90.8	82.1
OASPL	92.7	93.9	96.0	98.0	99.4	99.4	98.6	96.9	95.3	92.9	87.0
PNL	89.5	92.5	95.3	97.8	99.3	99.8	100.2	99.8	99.2	99.0	89.4
PNLT	89.5	92.5	95.3	99.1	100.4	100.8	100.7	99.8	99.2	100.4	90.7

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE C-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

*Without truck*

OCTOBER 28 1976

EVENT 77 85 KT. FLY BY MIC. CENTERLINE(HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-6.0	-4.5	-3.0	-1.5	0	1.5	3.0	4.5
17	78.0	79.1	78.3	73.5	73.4	79.6	77.4	80.3
18	84.9	87.0	88.5	87.6	83.2	78.5	69.6	70.7
19	72.7	73.6	74.2	71.4	65.7	65.9	65.4	69.7
20	68.5	69.6	69.1	68.6	78.2	79.0	73.7	71.9
21	80.0	80.1	73.6	83.0	88.1	82.1	72.6	62.3
22	66.6	65.9	70.3	80.0	81.0	77.0	76.1	72.5
23	66.6	73.3	80.9	88.8	84.8	71.8	73.7	72.2
24	70.6	80.6	82.0	82.9	75.6	74.3	70.6	74.6
25	73.1	80.6	80.9	78.4	83.3	79.2	75.4	69.3
26	72.1	79.0	76.8	84.2	80.8	77.6	74.8	72.3
27	69.4	74.2	80.9	80.9	80.6	77.8	73.3	71.9
28	62.4	74.8	79.3	78.2	78.5	76.4	72.0	69.0
29	65.7	72.2	75.3	77.5	78.6	76.0	72.3	69.5
30	62.6	72.0	74.7	76.9	77.7	75.6	71.1	68.0
31	62.0	69.1	72.7	75.5	76.5	75.0	73.7	69.5
32	59.5	66.7	70.8	74.7	74.9	71.6	68.3	65.5
33	57.2	63.0	67.5	71.0	72.4	69.1	65.3	61.0
34	55.3	59.6	64.8	68.2	68.1	66.3	61.8	57.4
35	55.0	56.5	61.4	65.3	65.3	63.0	58.3	55.1
36	55.0	55.0	56.6	60.7	61.6	59.4	56.4	55.0
37	55.0	55.0	55.8	59.7	60.7	58.5	55.5	55.0
38	55.0	55.0	59.1	61.2	57.0	55.7	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	74.6	82.1	84.7	86.9	86.7	83.9	80.9	77.7
D	81.8	87.1	89.4	92.2	91.6	87.8	85.0	82.5
OASPL	91.9	95.2	97.1	97.5	94.9	90.4	89.2	87.0
PNL	89.4	94.3	96.4	99.9	98.7	95.4	92.1	89.6
PNLT	90.5	94.3	97.1	100.5	96.7	95.4	92.5	89.6

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 78 95 KT. FLY BY MIC. CENTERLINE (HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-4.5	-3.5	-2.5	-1.5	-1.0	-.5	0	.5	1.5	2.5	3.0
17	83.9	82.5	80.6	76.9	75.3	74.9	74.8	75.7	80.9	80.7	77.5
18	87.2	88.3	89.5	89.6	89.0	88.1	86.5	84.7	80.5	72.9	70.2
19	76.0	75.6	75.4	74.2	72.4	69.7	67.6	67.7	66.3	66.0	67.1
20	72.8	72.9	70.9	68.1	69.4	73.9	77.0	80.2	80.8	77.6	76.1
21	82.2	83.2	80.0	82.2	85.6	88.1	88.2	88.7	85.7	75.6	74.1
22	69.4	69.4	68.8	76.5	79.7	81.1	82.0	81.7	79.7	77.6	77.2
23	66.6	77.6	81.4	89.9	92.0	91.8	89.8	85.1	74.6	73.7	75.3
24	73.5	82.6	84.3	87.6	87.2	84.6	79.8	75.1	74.9	71.6	72.0
25	76.2	84.7	85.0	79.5	80.5	82.2	82.7	81.4	77.7	76.5	75.3
26	74.0	82.6	81.9	82.1	83.5	83.1	81.4	78.8	76.0	75.6	76.6
27	68.4	74.6	81.9	83.4	81.2	79.1	79.0	79.0	76.7	75.4	74.0
28	62.9	77.8	81.0	81.1	80.3	79.2	77.3	77.1	75.9	73.1	71.7
29	65.4	72.6	78.4	78.9	77.7	77.3	77.0	77.4	76.7	73.8	72.5
30	62.0	75.2	77.9	78.9	78.2	77.2	77.7	78.1	76.2	73.2	71.7
31	62.5	71.5	75.1	75.3	74.9	75.2	75.5	75.5	75.9	73.8	72.5
32	61.1	69.0	72.5	73.9	74.3	75.3	75.5	75.0	73.0	70.4	69.0
33	58.0	64.5	68.8	70.5	70.6	71.6	71.8	71.8	70.4	67.4	65.7
34	55.7	61.1	65.3	68.2	68.6	69.0	69.1	69.0	67.4	63.8	62.1
35	55.0	58.0	62.6	65.0	65.2	65.5	65.9	66.0	64.8	61.0	58.7
36	55.0	55.4	57.6	60.3	60.7	61.5	62.0	62.0	60.9	58.2	56.7
37	55.0	55.0	55.8	57.6	58.0	58.8	59.7	60.6	60.0	57.1	56.1
38	55.0	55.4	62.2	65.1	63.7	61.2	59.1	57.8	56.3	55.1	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	76.3	84.9	87.3	88.2	88.2	87.9	86.9	86.0	84.5	81.8	80.9
D	83.8	89.8	91.7	93.5	93.9	92.5	92.4	91.3	89.0	86.1	85.4
OASPL	94.9	97.1	98.3	99.5	100.0	99.7	98.5	96.5	91.5	88.6	88.5
PNL	91.2	97.2	98.8	100.8	101.7	101.6	100.5	93.7	96.5	93.5	92.8
PNLT	91.2	98.6	100.0	102.2	102.9	102.3	100.5	98.7	96.5	93.5	92.8

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0



TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

*without truck*

OCTOBER 28 1976

EVENT 79 95 KT. FLY BY MIC. CENTERLINE (HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-3.5	-2.5	-1.5	-.5	0	.5	1.5	2.5	3.5	4.0
17	81.3	79.7	77.4	75.5	75.5	74.9	77.4	80.7	74.6	75.5
18	87.7	88.6	89.1	88.3	87.3	85.4	81.5	76.2	69.2	69.9
19	75.7	75.6	74.2	70.9	68.9	67.1	66.8	65.3	66.4	67.8
20	72.6	71.2	69.3	71.4	75.7	77.8	81.1	80.0	76.7	67.7
21	83.2	82.0	77.7	86.4	89.0	89.2	87.1	79.6	72.3	67.4
22	69.8	68.6	72.2	80.5	82.0	82.3	80.3	80.8	80.5	76.3
23	69.8	77.5	85.6	92.3	92.1	90.1	79.3	74.4	75.0	73.5
24	76.9	80.6	83.7	86.4	84.6	79.6	77.0	75.5	71.2	72.8
25	79.6	82.7	81.2	83.0	84.5	84.4	80.1	79.3	74.2	70.3
26	76.8	78.8	79.5	84.9	84.8	83.0	79.3	77.5	75.5	74.8
27	70.4	73.0	81.3	81.5	81.1	81.3	79.8	78.2	73.3	70.3
28	66.7	75.3	78.6	80.2	79.9	79.1	78.4	76.3	71.3	71.0
29	66.8	70.7	76.5	79.4	79.3	78.7	78.4	76.7	71.3	70.5
30	64.5	71.1	76.2	79.1	79.2	78.3	76.9	74.9	70.7	69.5
31	64.2	69.3	74.1	77.3	77.3	77.3	77.9	77.4	74.6	72.2
32	62.5	67.7	71.6	76.0	76.8	76.8	75.6	71.8	67.7	66.7
33	59.0	63.6	68.0	72.0	73.2	73.2	72.3	69.0	64.3	62.8
34	57.1	61.2	66.2	69.3	70.1	70.2	69.0	66.2	62.6	60.5
35	55.0	59.3	63.4	66.2	66.7	66.8	66.1	63.1	58.6	56.1
36	55.0	55.8	59.3	62.1	62.4	62.7	62.6	59.3	55.6	55.2
37	55.0	55.0	56.2	58.0	58.7	59.8	60.4	57.8	56.3	55.9
38	55.0	56.6	63.4	62.5	61.0	59.7	56.5	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	79.1	82.4	86.0	89.3	89.2	88.2	86.5	84.9	80.8	79.2
D	85.2	87.4	90.9	94.4	94.4	93.5	91.0	89.0	85.2	83.3
OASPL	94.6	96.0	97.8	99.4	99.2	97.8	93.4	90.3	88.1	86.7
PNL	92.7	95.6	98.0	102.2	102.3	101.3	98.2	96.0	92.6	90.8
PNLT	92.7	96.3	99.3	103.2	103.0	101.3	98.2	97.4	94.4	92.2

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

*without truck*

OCTOBER 28 1976

EVENT 80 105 KT. FLY BY MIC. CENTERLINE (HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-3.5	-2.5	-1.5	-.5	0	.5	1.5	2.5	3.5	4.0
17	85.7	84.5	81.5	76.6	75.5	76.0	81.3	80.2	78.0	80.1
18	86.7	89.7	90.9	89.0	86.9	84.7	79.7	71.6	70.7	70.4
19	77.7	78.2	77.4	72.2	70.2	69.7	68.3	68.0	69.7	70.6
20	74.0	71.2	69.7	75.6	73.4	81.4	82.5	78.9	70.0	74.5
21	79.7	82.0	80.1	88.1	88.7	88.6	85.2	77.1	68.3	64.0
22	69.2	70.2	74.5	81.6	82.3	81.9	79.6	80.8	74.5	72.0
23	68.7	79.7	86.8	92.3	91.2	86.8	74.6	76.7	75.1	72.1
24	75.9	82.3	83.6	84.3	82.1	77.3	77.0	73.2	75.4	76.8
25	77.3	83.6	80.3	83.1	83.6	82.5	79.6	76.6	70.7	71.6
26	74.6	80.3	78.3	83.7	83.5	80.8	76.5	75.7	75.2	73.3
27	66.7	74.8	78.9	80.3	81.0	80.7	77.4	75.0	72.4	72.1
28	65.3	75.0	76.0	78.8	79.0	78.5	76.8	73.7	71.8	70.7
29	65.2	71.5	74.8	78.2	78.4	77.6	76.9	74.0	70.8	70.1
30	63.7	72.3	75.5	77.9	78.2	77.4	76.0	73.8	71.2	70.0
31	62.1	70.9	73.7	76.7	76.8	76.0	78.0	76.4	74.8	73.5
32	60.5	66.6	72.4	76.3	76.7	75.6	72.9	70.6	68.7	67.3
33	58.0	64.6	68.9	73.3	73.5	72.7	70.2	67.4	63.5	61.8
34	56.6	61.3	66.5	70.3	70.3	69.4	67.4	65.6	61.5	59.4
35	55.3	59.0	63.1	67.3	67.7	66.8	64.6	61.3	56.6	55.6
36	55.0	55.9	59.3	63.2	63.8	63.1	61.4	58.6	55.4	55.1
37	55.0	55.0	56.3	59.9	61.4	61.9	60.4	59.0	57.8	56.2
38	55.0	58.0	62.9	62.6	61.1	59.3	56.1	55.1	55.0	55.0
39	55.0	55.0	55.0	55.4	55.8	55.6	55.1	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.3	55.3	55.0	55.0	55.0	55.0
A	77.0	83.4	85.2	88.5	88.4	87.0	84.7	82.7	80.7	79.6
D	84.5	89.2	91.1	94.2	93.8	92.2	89.5	87.3	84.8	83.9
OASPL	95.6	98.6	99.8	99.9	98.7	96.4	92.3	90.0	87.5	87.0
PNL	91.4	96.7	98.4	102.3	101.9	99.7	96.9	94.7	92.2	91.3
PNLT	91.4	97.2	99.6	103.1	101.9	99.7	98.1	96.1	93.8	92.9

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE G-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

Without Truck

OCTOBER 28 1976

EVENT 81 105 KT. FLY BY MIC. CENTERLINE(HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-5.0	-4.0	-3.0	-2.0	-1.5	-1.0	0	1.0	2.0	2.5
17	85.0	84.3	81.7	78.5	76.8	76.0	78.2	80.2	76.4	76.5
18	87.5	87.8	89.2	89.4	88.1	84.9	80.0	74.6	68.5	68.8
19	77.0	77.3	76.9	73.9	71.5	68.3	66.6	67.5	64.9	67.3
20	73.1	72.6	70.8	70.8	74.1	75.7	81.0	80.9	75.7	68.2
21	81.6	82.0	79.1	87.4	89.5	89.0	85.4	78.9	71.7	68.3
22	70.0	70.7	71.5	80.9	82.2	82.4	78.8	80.7	80.5	76.1
23	70.1	81.5	86.4	92.2	92.3	90.1	79.3	74.8	75.7	74.8
24	76.1	82.5	83.4	87.0	86.0	81.1	78.0	77.0	70.7	72.8
25	77.8	83.2	81.6	81.6	84.9	84.9	80.9	78.5	73.6	71.8
26	76.5	81.1	79.4	84.6	85.2	83.7	80.2	76.6	75.5	75.3
27	69.5	75.1	81.3	82.2	82.5	81.9	79.7	76.6	71.9	72.1
28	65.2	77.0	78.8	80.0	80.3	79.6	78.7	74.8	71.2	71.7
29	65.9	72.4	76.4	79.3	79.9	79.8	78.2	74.5	70.4	70.5
30	64.1	72.4	74.1	77.9	79.6	80.1	78.2	74.5	70.4	70.2
31	63.1	70.1	72.0	76.3	77.4	77.4	77.3	76.7	73.6	72.8
32	61.7	67.2	69.3	74.4	76.4	76.9	74.7	70.8	67.7	67.4
33	58.1	63.5	65.4	71.4	73.4	73.5	71.9	67.7	63.5	62.7
34	56.8	60.6	62.7	68.5	69.9	70.3	69.4	65.3	61.1	59.9
35	55.0	58.5	60.5	65.7	67.3	67.6	66.5	61.8	56.9	55.2
36	55.0	55.1	57.0	61.1	62.8	63.2	61.9	59.0	55.6	55.0
37	55.0	55.0	55.0	57.4	59.0	59.9	60.2	59.0	56.4	55.3
38	55.0	55.5	61.1	62.3	61.0	59.2	56.2	55.3	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	78.3	84.0	85.5	88.8	89.6	88.7	86.3	83.6	80.2	79.7
D	84.9	89.2	90.6	94.1	94.7	93.7	90.8	87.9	85.0	84.1
OASPL	94.9	96.2	98.2	100.6	100.2	98.4	92.8	89.9	87.8	86.8
PNL	92.0	96.5	97.9	102.1	102.7	101.5	97.9	95.4	91.9	91.4
PNLT	92.0	97.6	98.9	103.1	103.4	101.5	97.9	96.7	93.4	92.7

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VII  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

With Truck

OCTOBER 28 1976

EVENT 35, 0 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	72.6	76.4	68.4	72.1	2.1
15	75.5	77.6	72.7	75.3	1.4
16	80.5	84.2	76.0	80.1	1.8
17	81.3	84.0	77.8	81.0	1.6
18	82.6	85.8	79.2	82.3	1.7
19	84.3	86.6	81.8	84.1	1.5
20	86.7	90.1	83.6	86.3	1.9
21	87.9	91.7	82.3	87.3	2.4
22	87.9	91.2	81.1	87.1	2.9
23	89.7	95.4	82.5	88.5	3.3
24	89.5	93.8	82.0	88.5	3.2
25	87.6	90.8	78.6	86.6	3.3
26	86.1	89.3	78.0	85.1	3.2
27	86.5	90.2	78.6	85.6	3.0
28	85.1	90.0	79.7	84.5	2.4
29	82.3	84.9	76.7	81.8	2.3
30	80.0	82.3	74.6	79.7	2.0
31	77.9	80.1	71.9	77.5	2.0
32	76.2	78.4	70.9	75.9	1.9
33	73.0	75.2	67.8	72.6	1.9
34	69.5	71.6	65.0	69.3	1.7
35	66.3	68.3	62.7	66.1	1.6
36	62.6	64.2	59.2	62.4	1.5
37	61.1	63.0	58.0	61.0	1.3
38	61.4	64.3	58.3	61.1	1.6
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	91.3	94.7	85.1	90.8	2.4
DBD	96.1	99.5	90.0	95.6	2.4
OASPL	98.2	101.5	92.7	97.7	2.3
PNL	103.3	106.5	97.2	102.8	2.2
PNLT	103.7	107.1	97.2	103.1	2.4

270°  
(Microphone Location  
Relative to Helicopter)

TABLE G-VII  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 36, 45 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	73.6	77.4	67.9	72.8	2.6
15	74.0	76.8	69.2	73.7	1.7
16	79.7	82.9	73.7	79.0	2.5
17	88.2	90.2	85.2	88.1	1.3
18	91.0	92.7	88.5	90.8	1.1
19	80.2	82.7	76.5	79.9	1.8
20	83.6	86.9	79.5	83.3	1.7
21	84.5	87.7	79.9	84.1	2.0
22	83.7	89.8	79.0	82.7	2.8
23	85.4	93.1	79.0	83.6	3.4
24	86.1	93.4	78.6	84.6	3.2
25	85.7	92.9	77.9	84.3	3.2
26	84.4	89.6	78.2	83.6	2.5
27	84.9	89.7	79.2	84.2	2.6
28	83.0	87.4	79.4	82.5	2.1
29	81.0	83.5	77.9	80.7	1.4
30	79.6	82.1	76.2	79.4	1.4
31	78.2	80.4	75.8	78.1	1.3
32	76.6	79.1	74.4	76.4	1.2
33	74.7	78.2	71.7	74.4	1.7
34	71.8	75.2	68.3	71.4	1.8
35	68.4	72.1	65.3	68.1	1.7
36	64.2	67.5	61.5	63.9	1.6
37	59.3	62.0	56.9	59.1	1.3
38	55.9	57.6	55.0	55.9	.7
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	89.8	94.3	86.6	89.4	1.8
DBD	94.5	99.4	91.3	94.0	1.8
OASPL	96.9	101.1	93.8	96.5	1.6
PNL	102.0	106.0	98.8	101.6	1.7
PNLT	102.0	106.0	98.8	101.6	1.7

225°  
(Microphone Location  
Relative to Helicopter)

TABLE G-VII  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 37, 90 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	74.8	79.5	69.1	74.0	2.7
15	77.4	79.9	72.8	77.0	1.9
16	84.3	87.3	79.3	83.9	1.8
17	88.5	91.0	85.2	88.2	1.9
18	90.6	93.3	86.6	90.3	1.7
19	87.4	92.6	82.2	86.6	2.7
20	90.6	95.9	85.0	89.7	2.8
21	91.7	96.1	86.5	90.9	2.5
22	90.5	96.2	84.6	89.5	2.9
23	91.7	97.7	84.4	90.4	3.2
24	92.0	96.4	86.0	91.2	2.7
25	91.2	94.8	85.9	90.6	2.4
26	89.5	93.4	83.8	88.8	2.5
27	88.6	92.4	84.3	88.0	2.2
28	86.7	91.7	82.1	85.9	2.6
29	84.1	89.2	80.2	83.3	2.5
30	82.3	86.3	78.4	81.6	2.4
31	80.4	83.2	77.5	80.0	1.8
32	78.9	81.7	76.1	78.6	1.7
33	75.6	78.0	72.5	75.3	1.4
34	72.6	75.3	69.0	72.3	1.8
35	70.0	72.3	66.6	69.7	1.7
36	66.4	68.6	62.9	66.1	1.6
37	61.5	63.5	58.2	61.3	1.5
38	56.8	58.5	55.0	56.7	1.0
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	93.7	97.5	90.3	93.2	2.1
DBD	98.8	102.5	95.0	98.3	2.1
OASPL	101.3	105.3	97.3	100.8	2.1
PNL	106.2	109.8	102.3	105.7	2.0
PNLT	106.2	109.8	102.3	105.7	2.0

180°  
(Microphone Location  
Relative to Helicopter)

TABLE G-VII  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

*with truck*

OCTOBER 28 1976

EVENT 38, 135 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	75.1	79.5	72.5	74.9	1.4
15	81.7	84.5	77.7	81.2	2.1
16	88.8	92.0	84.4	88.1	2.5
17	90.7	94.5	88.0	90.3	1.8
18	91.3	93.6	88.7	91.1	1.4
19	93.0	97.1	88.2	92.3	2.6
20	94.5	98.8	89.1	93.7	2.6
21	95.1	99.9	89.2	94.3	2.6
22	95.3	100.8	89.2	94.0	3.2
23	95.9	101.7	88.0	94.4	3.5
24	96.2	102.3	90.9	95.0	3.1
25	94.6	99.6	86.8	93.3	3.5
26	91.6	95.5	85.1	90.8	2.8
27	91.6	95.9	85.8	90.8	2.7
28	89.5	93.7	84.8	88.8	2.6
29	87.3	91.5	82.5	86.6	2.5
30	85.0	87.9	81.9	84.6	1.9
31	83.7	87.7	80.1	83.2	2.1
32	81.8	85.9	77.7	81.3	2.1
33	79.1	82.7	75.8	78.6	2.0
34	75.6	79.1	72.0	75.1	2.2
35	72.1	75.2	69.0	71.7	1.8
36	68.6	71.4	66.0	68.3	1.6
37	65.3	66.4	65.0	65.3	.4
38	65.0	65.0	65.0	65.0	.0
39	65.0	65.0	65.0	65.0	.0
40	65.0	65.0	65.0	65.0	.0
DBA	97.0	101.5	92.3	96.2	2.6
DBD	102.2	106.7	97.7	101.4	2.6
OASPL	104.8	109.6	100.4	104.0	2.6
PNL	109.7	114.3	105.6	109.0	2.5
PNLT	109.7	114.3	105.6	109.0	2.5

*135°*  
*(Microphone Location  
Relative to Helicopter)*

# TABLE G-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 39, 180 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	73.6	77.9	68.1	72.9	2.7
15	77.2	80.4	71.9	76.6	2.2
16	82.3	85.2	76.1	81.6	2.7
17	84.5	88.0	80.9	84.1	1.9
18	86.1	89.4	83.0	85.7	1.9
19	86.6	89.6	82.1	86.3	1.8
20	88.6	91.7	83.5	88.3	1.9
21	89.8	92.4	84.8	89.3	2.1
22	89.5	92.9	85.0	89.0	2.0
23	89.3	92.3	84.6	88.9	2.1
24	90.4	93.3	85.5	89.8	2.2
25	89.5	93.1	84.3	89.0	2.2
26	87.5	91.1	83.9	87.0	2.1
27	87.2	91.0	82.8	86.7	2.1
28	85.6	89.7	82.3	85.1	2.0
29	83.0	86.9	79.9	82.6	1.9
30	80.2	83.6	76.5	79.9	1.7
31	78.7	81.3	75.2	78.4	1.7
32	77.2	79.8	72.9	76.8	1.9
33	74.3	76.7	70.2	74.0	1.6
34	71.4	75.2	67.0	71.1	1.9
35	68.3	70.9	65.1	68.0	1.6
36	65.7	67.5	65.0	65.6	.7
37	65.0	65.2	65.0	65.0	.0
38	65.0	65.1	65.0	65.0	.0
39	65.0	65.0	65.0	65.0	.0
40	65.0	65.0	65.0	65.0	.0
DBA	92.3	95.5	89.1	92.0	1.7
DBD	97.4	100.3	94.1	97.1	1.6
OASPL	99.5	102.3	95.6	99.2	1.6
PNL	104.8	107.5	101.1	104.5	1.6
PNLT	104.8	107.5	101.1	104.5	1.6

90°

(Microphone Location  
Relative to Helicopter)



# TABLE G-VII

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 10, 225 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	72.6	76.7	68.8	72.0	2.2
15	75.3	78.3	71.8	75.1	1.6
16	80.7	83.5	77.3	80.3	1.8
17	79.8	82.1	76.0	79.5	1.5
18	80.8	83.5	78.5	80.6	1.4
19	82.1	85.4	80.0	81.9	1.2
20	84.6	86.9	82.0	84.5	1.1
21	83.9	85.2	82.6	83.9	.6
22	81.5	84.6	77.4	81.2	1.3
23	81.8	84.3	78.1	81.5	1.7
24	83.3	86.6	79.6	82.9	2.0
25	83.4	87.3	79.1	82.9	2.0
26	81.9	83.8	78.5	81.7	1.4
27	82.1	84.4	77.1	81.7	1.8
28	80.5	82.5	75.6	80.2	1.7
29	79.0	80.1	74.5	78.7	1.5
30	77.4	79.3	72.6	77.1	1.5
31	75.4	77.0	71.2	75.2	1.5
32	74.0	75.8	70.2	73.8	1.4
33	71.7	74.1	69.1	71.5	1.4
34	70.7	74.9	68.0	70.4	1.7
35	67.7	70.6	65.5	67.5	1.2
36	65.4	67.0	65.0	65.3	.6
37	69.7	73.1	66.3	69.5	1.6
38	70.2	73.7	65.2	69.7	2.1
39	65.0	65.0	65.0	65.0	.0
40	65.0	65.0	65.0	65.0	.0
DBA	87.6	89.1	83.9	87.4	1.2
DBD	93.3	94.5	91.3	93.2	.8
OASPL	94.6	95.8	93.2	94.5	.7
PNL	100.5	102.0	98.0	100.3	1.0
PNLT	100.9	103.2	98.0	100.8	1.2

45°

(Microphone Location  
Relative to Helicopter)

TABLE G-VII  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

with truck

OCTOBER 28 1976

EVENT 41, 270 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	72.6	78.0	66.0	71.7	2.7
15	74.4	77.4	69.9	74.1	1.8
16	76.8	79.3	72.9	76.5	1.5
17	76.8	78.7	74.6	76.7	1.0
18	77.2	78.8	74.2	77.0	1.0
19	78.7	80.1	76.1	78.6	1.0
20	80.2	82.2	77.9	80.1	1.0
21	79.8	81.7	77.1	79.6	1.0
22	79.1	82.2	76.6	78.8	1.6
23	80.2	83.4	76.6	79.8	1.8
24	81.1	83.9	77.2	80.8	1.7
25	80.5	83.6	75.0	79.9	2.3
26	78.4	81.5	74.0	78.0	2.0
27	77.8	80.6	74.9	77.5	1.5
28	76.0	78.7	73.1	75.7	1.5
29	74.0	77.7	71.5	73.7	1.5
30	72.8	73.6	69.0	72.1	2.2
31	71.3	74.0	67.5	70.6	2.2
32	70.1	72.0	66.1	69.7	1.8
33	68.5	70.4	65.7	68.3	1.4
34	66.9	70.1	63.8	66.6	1.5
35	66.0	68.4	63.2	65.8	1.4
36	62.6	64.8	60.2	62.5	1.2
37	68.0	70.3	65.8	67.8	1.3
38	69.4	72.7	66.3	69.1	1.6
39	55.0	55.3	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	84.0	87.1	81.8	83.8	1.3
DED	89.6	91.7	87.7	89.5	1.0
OASPL	91.3	92.7	90.1	91.3	.7
PNL	97.1	99.1	95.0	97.0	1.0
PNLT	98.6	100.7	96.4	98.5	1.1

0°  
(Microphone Location  
Relative to Helicopter)

TABLE G-VII  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 42, 315, DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	71.8	75.7	67.2	71.4	2.0
15	74.9	76.7	72.4	74.8	1.0
16	81.6	83.8	79.5	81.5	1.2
17	80.6	82.5	78.0	80.4	1.2
18	83.9	85.8	81.7	83.8	.9
19	82.8	86.5	79.9	82.5	1.7
20	84.6	86.9	81.3	84.3	1.6
21	84.2	86.6	81.0	84.0	1.3
22	81.9	84.8	78.3	81.6	1.4
23	81.8	86.2	77.4	81.3	2.0
24	83.4	87.6	77.8	83.0	2.0
25	84.3	89.1	79.2	83.6	2.4
26	82.8	86.3	78.0	82.4	1.9
27	83.1	86.1	77.9	82.8	1.8
28	82.0	84.2	78.2	81.8	1.3
29	81.3	83.4	77.5	81.1	1.4
30	79.9	82.2	77.4	79.8	1.2
31	77.3	79.0	75.1	77.2	.9
32	75.8	77.1	73.4	75.7	1.0
33	75.7	78.4	72.7	75.4	1.5
34	72.1	74.4	68.7	71.9	1.4
35	68.7	70.3	66.3	68.6	1.0
36	66.9	68.9	64.9	66.8	1.2
37	72.7	74.8	70.6	72.6	1.2
38	72.1	74.6	69.3	71.9	1.4
39	57.0	58.5	55.4	56.9	.9
40	55.0	55.0	55.0	55.0	.0
DBA	89.3	91.7	85.8	89.1	1.3
DBD	94.0	96.4	90.9	93.9	1.2
OASPL	94.6	96.9	92.0	94.5	1.2
PNL	101.6	104.1	98.6	101.5	1.3
PNLT	102.9	105.0	99.8	102.7	1.3

315°  
(Microphone Location  
Relative to Helicopter)

TABLE G-VII  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 35, 0 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	71.7	75.2	68.5	71.5	1.4
15	74.2	77.5	71.6	74.1	1.2
16	80.0	84.6	77.3	79.7	1.6
17	81.2	83.4	78.1	81.0	1.5
18	84.2	86.7	81.6	83.9	1.5
19	82.5	85.1	79.4	82.3	1.2
20	83.2	84.8	79.8	83.0	1.4
21	81.8	83.9	78.3	81.6	1.5
22	76.3	78.5	73.3	76.1	1.2
23	74.6	76.9	72.7	74.5	1.1
24	73.6	76.4	71.3	73.4	1.4
25	72.0	74.1	69.5	71.7	1.4
26	73.0	76.6	69.9	72.7	1.7
27	72.7	75.3	69.8	72.5	1.4
28	73.0	76.4	70.1	72.7	1.7
29	72.3	75.0	69.9	72.1	1.1
30	71.5	74.2	68.9	71.3	1.3
31	70.7	73.0	68.5	70.6	1.2
32	70.1	71.7	67.9	69.9	1.0
33	69.1	70.5	66.6	68.9	1.2
34	66.3	67.9	64.2	66.2	1.1
35	63.6	65.5	61.4	63.5	1.1
36	61.1	63.3	59.1	61.0	1.1
37	63.1	65.5	60.7	62.9	1.3
38	63.3	66.9	60.2	63.0	1.7
39	59.0	61.0	57.6	59.0	.9
40	55.0	55.0	55.0	55.0	.0
DBA	81.1	83.1	79.3	81.0	1.0
DBD	87.0	88.4	85.3	86.9	.9
OASPL	91.1	92.3	89.5	91.0	.7
PNL	95.0	96.9	93.4	94.9	1.0
PNLT	95.2	97.5	93.4	95.0	1.1

90°

(Microphone Location  
Relative to Helicopter)

**TABLE G-VII**  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

*With track*

OCTOBER 28 1976

EVENT 36, 45 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	74.6	79.3	70.9	73.9	2.2
15	74.9	77.9	71.9	74.7	1.3
16	81.3	84.8	76.6	80.8	2.1
17	79.0	81.8	75.8	78.6	1.9
18	80.6	83.1	77.6	80.4	1.4
19	82.3	83.8	80.1	82.2	.9
20	84.0	85.7	81.1	83.8	1.2
21	82.8	86.1	78.0	82.4	1.9
22	77.6	80.2	74.9	77.3	1.5
23	75.4	77.7	71.5	75.1	1.3
24	74.4	76.6	70.5	74.1	1.9
25	73.1	76.2	67.1	72.4	2.6
26	72.9	77.2	67.6	72.2	2.6
27	72.6	77.1	66.7	71.7	3.0
28	72.6	77.5	67.3	71.7	2.9
29	73.4	78.2	66.8	72.3	3.1
30	73.3	77.9	67.3	72.4	2.8
31	72.6	76.7	65.7	71.7	2.9
32	71.6	75.0	64.2	70.8	2.9
33	71.4	74.6	64.4	70.8	2.6
34	71.6	74.5	65.4	71.1	2.2
35	67.5	70.1	61.8	67.1	2.0
36	64.5	66.7	59.6	64.2	1.7
37	71.7	74.9	68.5	71.5	1.5
38	72.2	75.2	66.5	71.8	2.0
39	63.4	65.0	60.7	63.3	1.0
40	55.0	55.0	55.0	55.0	.0
DBA	83.4	86.6	77.9	82.9	2.2
DBD	90.0	92.4	85.6	89.7	1.8
OASPL	92.1	92.3	90.5	92.1	.8
PNL	97.9	100.1	93.5	97.5	1.7
PNLT	99.3	101.6	95.3	99.0	1.7

*45°*  
*(Microphone Location  
Relative to Helicopter)*

TABLE G-VII  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

With truck

OCTOBER 28, 1976

EVENT 37, 90 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	70.2	74.2	63.1	69.5	2.6
15	73.2	76.6	68.4	72.8	2.0
16	79.7	83.6	74.2	79.1	2.4
17	78.1	81.0	70.6	77.8	1.9
18	80.3	83.2	74.1	80.0	1.9
19	81.0	84.2	75.9	80.7	1.8
20	82.0	84.2	76.1	81.7	1.8
21	80.8	84.0	72.9	80.3	2.2
22	79.5	83.8	73.8	78.9	2.3
23	75.9	80.8	70.3	75.2	2.4
24	76.5	80.4	72.3	75.8	2.3
25	75.8	79.4	71.7	75.3	2.1
26	76.2	80.2	72.9	75.8	1.9
27	76.3	79.7	72.3	75.9	2.0
28	75.6	79.1	71.6	75.3	1.8
29	75.1	77.8	70.3	74.8	1.8
30	73.6	75.7	69.6	73.3	1.7
31	72.2	74.3	67.6	71.9	1.7
32	71.4	73.5	67.9	71.2	1.5
33	71.9	73.4	67.8	71.7	1.4
34	71.4	72.7	67.5	71.2	1.2
35	69.5	71.6	64.9	69.2	1.6
36	66.2	68.7	61.4	65.9	1.8
37	71.6	73.5	68.3	71.5	1.2
38	74.9	78.1	69.4	74.6	1.8
39	55.3	57.2	55.0	55.3	.6
40	55.0	55.0	55.0	55.0	.0
DBA	84.2	86.4	80.8	84.0	1.4
DBD	90.4	92.0	87.1	90.2	1.2
OASPL	92.2	94.2	90.2	92.1	1.0
PNL	99.1	101.0	95.2	98.9	1.4
PNLT	101.1	103.0	97.1	100.8	1.5

0°  
(Microphone Location  
Relative to Helicopter)

**TABLE G-VII**  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

*with truck*

OCTOBER 28, 1976

EVENT 38, 135 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	70.2	73.9	59.9	69.3	3.1
15	74.7	79.1	65.9	73.9	2.9
16	81.3	85.2	73.6	80.4	3.0
17	80.4	84.2	72.6	79.6	2.8
18	81.8	85.1	76.4	81.2	2.4
19	81.6	84.9	74.4	81.0	2.4
20	84.0	87.9	76.6	83.1	2.9
21	82.4	85.5	76.6	81.8	2.5
22	81.2	83.8	78.3	81.1	1.1
23	75.6	78.5	72.9	75.5	1.2
24	74.7	77.4	72.7	74.5	1.2
25	72.8	75.6	69.8	72.5	1.5
26	73.5	76.7	70.1	73.2	1.7
27	73.7	76.8	69.7	73.4	1.8
28	73.4	75.8	69.5	73.1	1.7
29	73.8	76.5	71.0	73.5	1.5
30	73.5	76.3	70.9	73.3	1.4
31	72.5	74.9	69.9	72.3	1.4
32	71.9	75.0	69.0	71.6	1.5
33	72.4	75.9	69.7	72.1	1.6
34	71.3	74.7	68.0	70.9	1.9
35	68.1	71.4	64.3	67.7	1.9
36	65.7	69.2	62.1	65.3	1.9
37	69.0	71.6	65.1	68.6	1.9
38	73.9	77.4	70.3	73.5	2.0
39	55.6	57.1	55.0	55.5	.7
40	55.0	55.0	55.0	55.0	.0
DBA	83.5	86.1	81.0	83.3	1.3
DEB	89.9	92.4	87.5	89.7	1.3
OASPL	92.4	93.5	91.5	92.3	.5
PNL	98.4	100.7	96.0	98.2	1.3
PNLT	100.3	102.9	97.6	100.1	1.4

*315°*  
*(Microphone Location  
Relative to Helicopter)*

**TABLE G-VII**  
**5 FOOT HOVER TEST**

**1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA**

SIKORSKY S-64

*With Truck*

OCTOBER 28 1976

EVENT 39, 180 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	73.6	78.5	70.2	73.1	2.0
15	74.5	77.1	71.1	74.3	1.3
16	79.4	82.2	74.7	79.0	1.9
17	82.9	85.2	79.5	82.7	1.3
18	85.8	88.6	81.7	85.5	1.7
19	83.6	85.6	81.9	83.5	.9
20	86.3	89.2	84.3	86.1	1.2
21	87.5	91.2	83.4	87.1	1.9
22	82.7	84.7	78.6	82.5	1.5
23	79.5	82.2	75.3	79.2	1.7
24	78.4	80.7	74.8	78.1	1.7
25	77.9	80.6	74.2	77.4	2.2
26	78.8	80.6	73.2	78.2	2.4
27	79.9	81.7	73.1	79.0	2.8
28	79.7	82.3	72.5	78.9	2.8
29	79.3	82.3	71.9	78.3	3.0
30	77.0	79.5	70.3	76.3	2.7
31	75.2	77.6	69.8	74.6	2.4
32	73.6	75.9	68.8	73.1	2.1
33	71.1	73.9	67.2	70.8	1.7
34	68.5	71.1	65.7	68.2	1.4
35	65.9	67.9	65.0	65.8	.8
36	65.1	65.5	65.0	65.0	.1
37	65.0	65.3	65.0	65.0	.1
38	65.4	67.1	65.0	65.4	.5
39	65.2	66.0	65.0	65.2	.3
40	65.0	65.0	65.0	65.0	.0
DBA	86.1	88.7	81.3	85.6	2.3
DBD	91.1	92.8	88.6	90.9	1.5
OASPL	94.6	95.9	92.5	94.5	1.0
PNL	99.4	102.3	97.0	99.2	1.4
PNLT	99.4	102.3	97.0	99.2	1.4

**270°**

(Microphone Location  
Relative to Helicopter)



# TABLE G-VII

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

*With Truck*

OCTOBER 28, 1976

EVENT 40, 225 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	70.1	74.1	61.6	68.9	3.4
15	74.7	77.6	69.6	74.2	2.3
16	81.9	85.4	74.6	81.3	2.5
17	85.6	90.9	76.9	84.6	3.2
18	87.7	92.1	78.9	86.9	2.9
19	82.8	86.1	76.9	82.2	2.4
20	84.0	86.6	77.6	83.4	2.5
21	82.7	85.9	77.1	82.0	2.4
22	79.9	82.2	77.2	79.7	1.3
23	75.6	77.5	70.9	75.4	1.7
24	77.5	80.4	71.1	76.9	2.5
25	76.3	80.4	69.6	75.4	2.8
26	76.4	82.1	69.6	75.3	3.1
27	76.1	81.8	69.0	74.9	3.3
28	75.7	80.8	70.2	74.8	2.9
29	74.8	81.3	68.5	73.7	2.9
30	72.3	77.5	66.8	71.7	2.2
31	71.3	75.6	68.5	71.0	1.6
32	69.8	73.8	67.2	69.5	1.5
33	72.9	75.4	68.8	72.5	1.9
34	65.9	68.0	65.0	65.8	.8
35	65.0	65.1	65.0	65.0	.0
36	65.0	65.0	65.0	65.0	.0
37	65.0	65.0	65.0	65.0	.0
38	65.0	65.0	65.0	65.0	.0
39	65.0	65.0	65.0	65.0	.0
40	65.0	65.0	65.0	65.0	.0
1/3A	83.2	87.4	79.9	82.9	1.7
DBD	89.5	91.5	87.8	89.4	.9
OASPL	94.4	96.6	92.4	94.3	1.0
PNL	98.7	100.4	96.2	98.6	1.2
PNL <sub>1</sub>	99.9	101.5	96.2	99.8	1.1

*225°*

*(Microphone Location  
Relative to Helicopter)*

**TABLE G-VII**  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

*With truck*

OCTOBER 28, 1976

EVENT 41, 270 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	70.4	75.1	61.9	69.4	3.0
15	75.5	78.4	71.4	75.1	1.7
16	80.6	83.6	73.1	80.2	2.0
17	86.2	88.9	81.9	85.9	1.9
18	88.1	91.2	83.1	87.6	2.1
19	80.5	82.5	75.1	80.2	1.7
20	83.5	85.9	78.4	83.0	2.1
21	83.7	87.0	75.4	83.1	2.5
22	80.3	84.1	77.1	79.9	1.9
23	73.6	77.5	70.2	73.0	2.1
24	73.7	78.9	69.7	72.9	2.6
25	70.2	72.1	66.2	69.5	2.3
26	69.7	73.7	65.2	69.1	2.3
27	69.4	73.2	65.0	68.6	2.7
28	68.5	72.7	65.0	67.9	2.2
29	68.1	69.8	65.0	67.4	2.4
30	68.5	74.2	65.4	67.7	2.5
31	68.6	70.4	65.5	67.8	2.5
32	67.7	68.8	65.2	66.9	2.3
33	69.9	70.0	66.1	68.8	2.6
34	65.6	65.1	65.0	65.4	1.2
35	65.1	65.0	65.0	65.1	.4
36	65.0	65.0	65.0	65.0	.1
37	65.0	65.0	65.0	65.0	.0
38	65.0	65.0	65.0	65.0	.0
39	65.0	65.0	65.0	65.0	.0
40	65.0	65.0	65.0	65.0	.0
DBA	79.8	80.2	76.6	79.2	2.1
DBD	88.2	88.0	86.7	88.0	1.3
OASPL	94.3	95.9	92.5	94.1	1.2
PNL	96.4	100.5	94.8	96.2	1.4
PNLT	97.1	102.5	94.8	96.6	1.9

*180°*

*(Microphone Location  
Relative to Helicopter)*

**TABLE G-VII**  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

*With Truck*

OCTOBER 28 1976

EVENT 42, 315 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	74.1	79.8	69.5	73.1	2.8
15	75.8	77.9	72.2	75.6	1.6
16	80.7	83.3	76.4	80.4	1.6
17	79.9	82.4	77.6	79.7	1.2
18	83.6	86.0	81.2	83.4	1.3
19	81.9	83.4	79.8	81.9	.8
20	85.8	87.6	83.6	85.7	.8
21	87.5	89.4	84.9	87.4	1.0
22	79.9	82.5	76.7	79.7	1.5
23	77.1	79.7	73.9	76.8	1.5
24	75.1	78.0	72.3	74.9	1.5
25	73.8	75.9	71.1	73.7	1.3
26	74.0	76.1	71.6	73.8	1.2
27	73.4	75.3	70.7	73.2	1.2
28	73.1	75.2	69.3	72.9	1.3
29	72.3	74.3	69.4	72.1	1.2
30	71.0	72.6	68.1	70.9	1.0
31	72.3	75.2	69.5	72.1	1.3
32	70.6	72.8	68.7	70.5	.9
33	71.6	73.7	69.4	71.4	1.3
34	65.9	67.0	65.1	65.9	.4
35	65.0	65.1	65.0	65.0	.0
36	65.0	65.0	65.0	65.0	.0
37	65.0	65.0	65.0	65.0	.0
38	65.0	65.0	65.0	65.0	.0
39	65.0	65.0	65.0	65.0	.0
40	65.0	65.0	65.0	65.0	.0
DBA	81.8	83.0	79.7	81.7	.8
DBD	88.7	89.4	87.7	88.7	.5
OASPL	92.9	94.3	91.5	92.9	.6
PNL	97.6	98.4	96.4	97.5	.5
PNLT	98.3	99.4	96.7	98.3	.7

135°  
(Microphone Location  
Relative to Helicopter)

# TABLE G-VII

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

*without truck*

OCTOBER 28 1976

EVENT 86, 0 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)

(DBA RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	67.7	69.6	66.2	67.6	.9
15	72.3	76.1	70.0	72.1	1.3
16	77.1	82.4	73.0	76.5	2.2
17	77.6	81.5	74.3	77.2	1.8
18	78.6	81.2	74.8	78.2	1.7
19	81.2	86.0	76.4	80.3	2.5
20	82.1	85.6	77.9	81.6	2.0
21	81.2	85.8	77.3	80.6	2.2
22	80.4	85.3	75.6	79.7	2.3
23	81.5	86.7	74.8	80.8	2.5
24	81.5	85.8	73.9	80.8	2.7
25	79.5	82.6	73.4	79.1	2.1
26	79.3	81.6	74.8	78.9	1.9
27	79.3	82.4	75.2	78.9	1.9
28	77.9	81.9	73.2	77.4	2.2
29	76.4	80.0	72.0	75.9	2.0
30	74.6	78.0	70.1	74.3	1.8
31	72.0	74.6	68.8	71.8	1.4
32	69.9	72.0	67.2	69.7	1.2
33	67.2	69.3	65.1	67.0	1.2
34	65.3	66.6	65.0	65.3	.5
35	65.0	65.0	65.0	65.0	.0
36	65.0	65.0	65.0	65.0	.0
37	65.0	65.0	65.0	65.0	.0
38	65.0	65.0	65.0	65.0	.0
39	65.0	65.0	65.0	65.0	.0
40	65.0	65.0	65.0	65.0	.0
DBA	84.3	87.1	80.8	84.0	1.7
DBD	89.8	92.5	87.3	89.6	1.3
OASPL	91.7	95.4	88.8	91.5	1.5
PNL	97.7	100.5	94.9	97.5	1.3
PNLT	97.7	100.5	94.9	97.5	1.3

*270°*

*(Microphone Locator  
Relative to Helicopter)*

*TABLE G-VII*  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

*Without Truck*

OCTOBER 28 1976

EVENT 87, 45 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DBA RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	66.2	68.0	64.1	66.1	1.0
15	70.2	72.5	66.9	70.0	1.4
16	75.0	78.1	71.0	74.5	2.0
17	83.9	85.5	81.7	83.8	1.0
18	85.8	87.5	83.9	85.7	.9
19	79.1	80.6	77.0	79.0	1.1
20	82.2	84.9	79.3	82.0	1.6
21	82.5	84.9	77.2	82.1	2.1
22	80.1	83.4	75.4	79.8	1.5
23	80.8	85.0	77.4	80.3	2.0
24	80.8	83.4	77.3	80.5	1.6
25	79.1	82.6	76.0	78.8	1.8
26	78.7	81.7	75.4	78.4	1.6
27	79.1	82.7	74.9	78.7	1.8
28	78.1	80.8	74.8	77.8	1.6
29	76.6	79.4	73.0	76.4	1.4
30	75.3	76.9	70.9	75.1	1.3
31	75.0	76.8	70.6	74.6	1.6
32	73.1	75.7	69.8	72.8	1.6
33	70.9	73.4	67.8	70.6	1.4
34	68.5	71.5	65.1	68.3	1.4
35	65.3	69.4	62.5	65.0	1.4
36	60.7	63.3	58.1	60.5	1.2
37	55.9	57.5	55.0	55.9	.6
38	55.0	55.0	55.0	55.0	.0
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	85.1	87.6	82.4	85.0	1.3
DBD	89.8	92.2	87.8	89.7	1.1
OASPL	92.5	94.1	91.0	92.4	.8
PNL	97.5	99.6	95.1	97.4	1.1
PNLT	97.5	99.6	95.5	97.4	1.1

*225°*  
*(Microphone Location  
Relative to Helicopter)*

*TABLE G-VII*  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

*Without Truck*

OCTOBER 28 1976

EVENT 88, 90 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	69.5	71.5	66.0	69.3	1.4
15	79.1	82.3	72.5	78.3	2.9
16	86.4	89.0	77.8	85.5	3.2
17	88.8	90.8	87.1	88.7	1.0
18	89.9	91.8	88.3	89.8	.9
19	86.8	89.9	83.1	86.4	1.8
20	89.3	92.0	87.2	89.2	1.2
21	90.1	92.7	87.6	89.9	1.3
22	88.6	91.0	84.6	88.4	1.5
23	88.3	92.2	82.9	87.9	2.0
24	88.0	91.0	82.9	87.6	1.9
25	85.7	89.6	80.6	85.3	2.1
26	84.8	88.4	81.0	84.4	1.9
27	84.0	86.4	79.9	83.7	1.6
28	82.2	84.5	77.0	82.0	1.6
29	80.9	82.6	76.7	80.7	1.5
30	79.3	81.9	74.4	79.0	1.7
31	78.4	80.7	74.1	78.1	1.7
32	75.8	78.6	72.5	75.6	1.3
33	72.0	73.8	70.0	71.9	.9
34	69.1	70.9	66.5	69.0	1.1
35	65.6	67.2	63.2	65.5	.9
36	61.0	62.6	59.3	61.0	.7
37	56.6	57.4	55.5	56.6	.5
38	55.0	55.0	55.0	55.0	.0
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	89.8	91.6	86.0	89.6	1.3
DBD	95.0	96.8	91.7	94.8	1.3
OASPL	98.8	100.3	96.2	98.6	1.1
PNL	102.7	104.3	99.5	102.5	1.2
PNLT	102.7	104.3	99.5	102.5	1.2

*180°*  
*(Microphone Location)*  
*(Relative To Helicopter)*

TABLE G-VII  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

*Without Truck*

OCTOBER 23 1976

EVENT 89, 135 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DBA RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	70.1	72.4	66.6	69.5	1.5
15	78.6	80.8	75.2	78.3	1.6
16	85.3	87.9	80.7	84.9	2.0
17	89.3	92.2	86.2	89.0	1.5
18	88.8	91.5	85.5	88.6	1.4
19	90.9	95.9	85.7	90.3	2.2
20	93.0	98.2	89.5	92.4	2.1
21	92.5	97.1	88.5	91.9	2.1
22	92.4	97.9	87.2	91.4	2.9
23	92.2	98.5	85.9	90.8	3.3
24	90.8	96.1	85.0	89.9	2.8
25	87.7	91.5	82.4	87.0	2.5
26	86.2	89.1	81.0	85.7	2.3
27	86.3	89.2	83.2	86.0	1.6
28	85.2	88.7	80.8	84.7	2.2
29	82.8	86.1	79.3	82.4	1.9
30	80.6	83.1	77.8	80.3	1.6
31	79.8	82.5	77.2	79.5	1.5
32	77.1	79.6	75.1	77.0	1.3
33	74.8	77.0	73.1	74.7	1.0
34	70.8	74.1	68.1	70.6	1.4
35	67.2	70.6	65.5	67.0	1.3
36	65.1	65.6	65.0	65.1	.2
37	65.0	65.0	65.0	65.0	.0
38	65.0	65.0	65.0	65.0	.0
39	65.0	65.0	65.0	65.0	.0
40	65.0	65.0	65.0	65.0	.0
DBA	92.2	96.1	88.8	91.7	1.9
DBD	97.7	102.1	94.3	97.2	2.0
OASPI	101.3	105.8	98.0	100.8	2.0
PNL	105.6	109.8	102.4	105.1	1.9
PNLT	105.6	109.8	102.4	105.1	1.9

135°

(Microphone Location  
Relative to Helicopter)

TABLE G-VII  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

*without truck*

OCTOBER 28 1976

EVENT 90, 180 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	67.1	70.0	65.4	66.9	1.2
15	71.7	73.7	69.1	71.6	1.2
16	76.9	79.6	72.4	76.6	1.8
17	80.8	83.1	77.5	80.5	1.5
18	80.7	83.2	76.8	80.5	1.4
19	82.0	84.0	78.6	81.7	1.5
20	85.1	87.2	81.2	84.9	1.5
21	84.9	86.9	80.9	84.7	1.5
22	83.8	86.4	78.8	83.6	1.7
23	83.4	87.3	76.2	82.9	2.1
24	84.1	88.2	79.8	83.6	2.3
25	82.6	87.0	77.7	82.1	2.2
26	82.4	86.9	77.5	81.3	2.2
27	81.6	85.2	77.6	81.1	2.0
28	80.4	84.4	76.3	80.0	1.9
29	77.6	79.8	75.0	77.4	1.3
30	75.5	76.9	72.7	75.3	1.2
31	74.3	75.9	71.9	74.2	1.0
32	72.4	74.6	69.0	72.2	1.3
33	69.1	70.6	66.5	69.0	1.0
34	66.1	67.4	65.0	66.0	.7
35	65.0	65.0	65.0	65.0	.0
36	65.0	65.0	65.0	65.0	.0
37	65.2	66.0	65.0	65.2	.3
38	65.0	65.0	65.0	65.0	.0
39	65.0	65.0	65.0	65.0	.0
40	65.0	65.0	65.0	65.0	.0
DBA	86.8	90.1	83.8	86.5	1.6
DBD	92.0	94.9	89.2	91.8	1.4
OASPL	94.4	96.9	91.5	94.2	1.3
PNL	99.8	102.4	97.3	99.6	1.3
PNLT	99.8	102.4	97.3	99.6	1.3

90°  
(Microphone Location  
Relative to Helicopter)



TABLE G-VII  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

Without Truck

OCTOBER 28 1976

EVENT 92, 225 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	66.4	68.3	64.5	66.3	1.0
15	69.0	72.3	65.1	68.7	1.5
16	75.3	80.4	70.4	74.7	2.2
17	76.1	80.1	72.8	75.8	1.5
18	78.1	81.2	75.3	77.8	1.5
19	80.6	82.9	77.3	80.4	1.5
20	82.4	84.0	79.8	82.3	1.1
21	81.8	84.4	78.9	81.6	1.4
22	80.0	82.8	76.2	79.6	2.0
23	79.0	83.7	74.8	78.1	2.6
24	79.2	83.2	74.5	78.4	2.6
25	78.7	82.6	72.9	77.7	2.9
26	78.9	83.5	71.4	77.9	3.1
27	79.7	84.1	72.6	78.5	3.2
28	78.9	84.5	72.6	77.7	3.1
29	77.2	81.4	71.3	76.4	2.7
30	75.8	80.2	69.7	75.1	2.6
31	73.9	77.6	68.3	73.4	2.1
32	71.5	74.9	67.3	71.1	1.8
33	68.6	71.8	64.6	68.3	1.6
34	66.3	68.4	61.8	66.0	1.7
35	64.4	66.3	60.6	64.2	1.5
36	61.3	63.1	57.7	61.1	1.4
37	72.0	74.4	68.0	71.7	1.6
38	58.8	61.1	56.1	58.6	1.2
39	56.8	58.0	55.5	56.8	.6
40	55.0	55.0	55.0	55.0	.0
DBA	85.1	88.7	79.9	84.5	2.3
DBD	89.8	92.7	85.5	89.5	1.8
OASPL	91.5	94.4	89.0	91.3	1.5
PNL	98.0	100.6	93.9	97.7	1.7
PNLT	101.9	104.3	97.6	101.6	1.7

45°  
(Microphone Location)  
(Position to Helicopter)

TABLE G-VII  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

*Without truck*

OCTOBER 28 1976

EVENT 93, 270 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DBA RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	65.7	67.9	62.0	65.4	1.7
15	71.1	72.9	65.2	70.8	1.6
16	78.3	80.9	67.9	77.8	2.4
17	79.1	82.5	75.8	78.8	1.6
18	81.7	84.8	77.5	81.5	1.6
19	81.2	83.8	78.9	81.1	1.2
20	83.5	86.7	81.2	83.3	1.4
21	82.5	85.3	78.9	82.2	1.6
22	80.4	84.3	77.4	80.1	1.5
23	79.6	82.5	76.7	79.4	1.3
24	79.8	81.5	76.6	79.6	1.4
25	78.4	80.4	74.1	78.1	1.5
26	78.6	80.7	73.3	78.3	1.9
27	79.7	83.4	72.6	79.2	2.1
28	78.6	80.5	72.1	78.3	1.7
29	77.0	78.9	71.9	75.8	1.4
30	74.7	76.2	69.9	74.5	1.3
31	72.5	74.1	69.2	72.4	1.1
32	70.9	72.7	68.0	70.8	1.2
33	69.4	71.5	65.9	69.2	1.2
34	68.2	70.4	65.2	68.0	1.5
35	68.5	71.3	64.9	68.2	1.7
36	62.7	65.3	52.9	62.5	1.4
37	70.0	73.0	66.3	67.6	1.5
38	59.4	62.3	56.1	59.1	1.5
39	57.1	58.6	55.5	57.0	.6
40	55.0	55.0	55.0	55.0	.0
DBA	85.0	86.7	81.0	84.8	1.1
EDB	90.0	91.6	87.1	89.9	1.0
UASPL	92.0	93.7	90.3	92.0	.9
PWL	98.0	99.4	94.9	97.9	1.0
PNLT	100.2	102.2	97.6	100.8	1.0

0°  
(Microphone Location  
Relative to Helicopter)

TABLE G-VII  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

Without Truck

OCTOBER 28 1976

EVENT 86, 0 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	69.1	70.7	67.4	69.0	1.0
15	72.6	74.2	70.4	72.5	1.0
16	76.7	78.8	74.2	76.5	1.2
17	77.0	78.8	75.1	76.9	.9
18	79.1	80.3	76.6	79.0	1.0
19	81.2	84.1	78.9	81.1	1.2
20	83.8	86.4	82.2	83.7	1.0
21	82.4	84.0	79.9	82.3	1.1
22	77.8	81.5	75.4	77.6	1.4
23	74.6	76.2	72.7	74.5	1.0
24	74.5	76.9	72.0	74.3	1.2
25	73.2	75.7	70.1	73.1	1.2
26	72.6	74.4	69.9	72.4	1.2
27	71.9	73.8	69.0	71.7	1.3
28	71.2	72.7	69.4	71.1	.9
29	70.4	72.2	67.5	70.2	1.0
30	69.5	71.2	66.9	69.4	.9
31	69.6	71.4	67.1	69.4	1.2
32	67.9	70.1	65.5	67.8	.9
33	67.5	69.8	65.6	67.3	1.1
34	65.1	66.0	65.0	65.1	.2
35	65.0	65.0	65.0	65.0	.0
36	65.0	65.0	65.0	65.0	.0
37	65.5	67.0	65.0	65.5	.7
38	65.0	65.0	65.0	65.0	.0
39	65.0	65.0	65.0	65.0	.0
40	65.0	65.0	65.0	65.0	.0
DBA	79.5	80.9	77.1	79.4	.8
DBD	86.9	88.0	85.8	86.9	.5
OASPL	90.4	91.4	89.4	90.4	.5
PNL	95.1	95.9	93.9	95.1	.5
PNLT	95.1	95.9	93.9	95.1	.5

90°  
(Microphone located  
90° to the Helicopter)

# TABLE G-VII

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

*Without track*

OCTOBER 28 1976

EVENT 87, 45 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	64.3	66.2	62.5	64.3	.9
15	70.2	71.7	68.5	70.1	.9
16	76.4	79.0	73.2	76.1	1.8
17	74.7	80.4	70.6	74.0	2.3
18	76.4	81.4	72.5	75.7	2.2
19	80.7	84.7	77.2	80.3	1.9
20	82.5	84.9	78.6	82.2	1.8
21	80.3	83.1	77.5	80.0	1.6
22	75.1	78.3	72.3	74.7	1.7
23	72.4	76.5	68.6	71.9	2.0
24	72.6	76.2	68.2	72.1	2.3
25	71.3	76.0	65.1	70.6	2.6
26	70.9	74.9	64.9	70.2	2.6
27	71.3	76.1	64.8	70.5	2.7
28	72.1	76.0	66.4	71.3	2.8
29	73.7	78.2	67.8	72.8	2.8
30	72.8	78.1	67.5	71.8	3.0
31	71.3	76.1	66.5	70.5	2.6
32	69.9	73.7	64.9	69.2	2.5
33	69.2	72.5	64.7	68.5	2.4
34	66.8	69.1	62.0	66.3	2.1
35	65.5	68.1	61.1	65.0	2.0
36	62.4	64.8	58.9	62.1	1.7
37	74.0	76.4	69.1	73.5	2.2
38	60.2	62.5	56.6	59.9	1.8
39	57.5	58.7	55.8	57.4	.9
40	55.0	55.0	55.0	55.0	.0
DBA	81.8	84.7	77.7	81.3	2.1
DBD	88.4	90.2	84.9	88.0	1.8
OASPL	89.3	92.0	87.1	89.1	1.4
PNL	96.8	98.6	93.3	96.5	1.8
PNLT	101.0	103.0	97.1	100.6	1.9

45°  
(Microphone Location  
Relative to Helicopter)

TABLE G-VII  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

*Without Truck*

OCTOBER 28, 1976

EVENT 88, 90 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	65.2	67.0	62.5	65.1	1.1
15	72.3	73.8	70.1	72.2	1.5
16	78.6	80.5	74.9	78.4	1.5
17	81.7	83.6	79.2	81.6	1.0
18	82.6	84.3	79.8	82.4	1.1
19	79.1	81.6	75.8	78.9	1.4
20	81.7	83.3	77.8	81.5	1.4
21	80.3	82.8	76.4	80.1	1.4
22	77.0	80.5	71.1	76.3	2.6
23	71.9	73.9	67.3	71.5	1.9
24	73.0	76.7	68.5	72.6	2.0
25	71.6	73.9	68.6	71.3	1.6
26	72.1	75.5	68.6	71.6	1.9
27	71.5	75.5	68.1	71.4	1.9
28	71.4	74.5	67.5	71.0	1.7
29	71.2	74.7	67.7	70.9	1.8
30	70.2	72.9	66.9	69.9	1.5
31	68.8	71.6	65.8	68.5	1.6
32	67.7	70.5	63.9	67.4	1.6
33	68.8	71.8	63.2	68.4	2.1
34	67.0	70.2	62.0	66.6	2.0
35	67.3	71.1	60.9	66.6	2.6
36	61.3	64.7	56.0	60.7	2.3
37	69.4	72.6	64.3	69.0	2.1
38	57.7	60.4	55.1	57.4	1.7
39	55.0	55.0	55.0	55.0	.0
40	55.5	58.0	53.0	55.4	.8
DBA	80.5	83.1	77.1	80.2	1.5
DBD	85.9	89.2	83.3	86.7	1.4
OASPL	90.0	90.9	87.8	89.9	.8
PNL	95.1	97.4	91.3	94.9	1.5
PNLT	98.4	100.8	94.2	98.2	1.6

0°  
(Microphone Location  
Relative to Helicopter)

TABLE G-VII  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 89. 135 DEGREES. MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD LEV
14	64.9	67.5	61.3	64.6	1.6
15	69.5	71.3	66.8	69.3	1.3
16	75.1	77.6	70.1	74.3	2.3
17	78.8	82.7	74.2	78.2	2.4
18	79.2	81.8	76.2	78.8	1.3
19	80.0	82.8	78.1	79.8	1.1
20	83.5	85.8	80.7	83.4	1.1
21	81.2	83.4	79.0	81.0	1.1
22	77.7	81.5	72.7	77.0	2.4
23	73.6	77.0	68.3	73.1	2.4
24	74.1	78.3	68.5	73.4	2.4
25	73.9	76.0	67.3	73.2	2.5
26	74.8	76.2	69.7	74.2	2.3
27	75.3	76.8	70.2	74.6	2.5
28	74.5	76.5	70.2	74.3	2.1
29	75.0	77.9	71.8	74.7	1.8
30	74.2	76.4	70.4	73.9	1.7
31	73.9	76.1	69.4	73.7	1.4
32	71.8	73.8	69.0	71.6	1.4
32	70.7	73.5	67.1	70.4	1.6
34	68.4	69.8	65.3	68.2	1.5
35	66.7	68.6	63.5	66.5	1.5
36	63.9	66.3	60.9	63.7	1.4
37	74.9	78.1	71.1	74.4	2.0
38	63.5	66.2	50.9	63.3	1.5
39	59.2	60.5	58.0	59.1	.7
40	55.6	55.0	55.0	55.0	.0
DBA	83.7	85.5	81.1	83.5	1.5
DBD	89.8	92.2	87.0	89.6	1.4
OASPL	90.1	91.8	88.4	90.0	.9
PWL	98.4	101.1	95.6	98.1	1.5
PULT	102.1	105.2	99.0	101.8	1.7

315°

(Microphone Location  
Relative to Helicopter)

**TABLE G-VII**  
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

*without track*

OCTOBER 28, 1976

EVENT 90, 180 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICHO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	68.7	70.0	66.8	68.6	.9
15	73.7	74.6	72.1	73.6	.8
16	79.6	80.6	76.9	79.4	1.3
17	81.8	86.0	77.2	81.0	2.6
18	81.9	86.0	77.3	81.2	2.5
19	81.6	83.9	79.0	81.5	1.1
20	84.5	86.3	81.3	84.4	1.1
21	82.6	85.2	79.8	82.4	1.3
22	78.6	81.0	75.9	78.4	1.3
23	75.1	79.0	70.5	74.6	2.1
24	76.9	80.5	72.5	76.3	2.3
25	76.8	80.2	70.6	76.4	2.1
26	78.7	82.1	73.9	78.3	2.1
27	79.3	81.4	75.2	79.0	1.7
28	79.6	81.7	75.4	79.3	1.6
29	79.7	81.9	75.8	79.4	1.5
30	78.2	80.7	73.5	77.9	1.7
31	77.2	79.8	73.8	76.9	1.7
32	75.2	77.7	70.2	74.8	2.0
33	73.1	75.9	68.6	72.6	2.1
34	69.2	71.7	65.5	68.9	1.7
35	64.0	66.2	60.8	63.8	1.5
36	59.0	60.9	56.7	58.8	1.2
37	62.9	64.8	59.4	62.5	1.6
38	55.2	55.6	55.0	55.2	.2
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	86.4	88.4	82.7	86.2	1.5
DBD	90.4	92.3	87.4	90.2	1.3
OASPL	92.2	94.3	91.0	92.2	.9
PNL	98.1	100.2	95.2	97.9	1.3
PNLT	100.0	102.2	96.9	99.7	1.4

270°

(Microphone Location  
Relative to Helicopter)

# TABLE G-VII

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

*Without truck*

OCTOBER 28, 1976

EVENT 92, 225 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	67.0	69.6	63.9	66.9	1.1
15	72.8	75.1	70.3	72.5	1.4
16	81.6	83.9	78.4	81.6	1.6
17	84.4	86.8	80.7	84.2	1.5
18	86.4	89.2	83.2	86.2	1.4
19	82.7	84.4	80.0	82.5	1.2
20	84.2	86.5	81.3	84.1	1.1
21	82.4	85.4	78.7	82.2	1.5
22	81.7	85.3	78.4	81.4	1.8
23	80.7	84.3	75.8	80.2	2.1
24	81.6	84.0	77.9	81.3	1.6
25	80.7	83.2	76.2	80.4	1.7
26	79.8	82.5	74.7	79.4	2.0
27	80.9	84.1	76.1	80.4	2.2
28	79.5	81.9	75.5	79.2	1.8
29	78.1	80.3	74.1	77.8	1.6
30	76.3	78.1	72.9	76.1	1.4
31	76.5	79.5	73.8	76.3	1.2
32	74.2	76.7	71.7	74.0	1.3
33	73.2	75.5	70.6	73.0	1.3
34	68.2	70.1	65.0	68.0	1.3
35	64.8	66.8	61.9	64.6	1.3
36	60.8	62.9	58.3	60.7	1.2
37	56.9	58.7	55.1	56.3	1.0
38	55.0	55.0	55.0	55.0	.0
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	86.3	88.4	83.0	86.1	1.4
DED	94.7	96.2	92.1	94.5	1.1
OASPL	93.8	95.1	92.4	93.7	.7
PNL	98.8	100.3	96.2	98.7	1.1
PNLT	98.8	100.3	96.2	98.7	1.1

225°

(Microphone Location  
Relative to Helicopter)



# TABLE G-VII

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

Without Truck

OCTOBER 28 1976

EVENT 93, 270 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	68.0	70.0	65.6	67.8	1.1
15	73.5	74.8	71.6	73.4	1.1
16	81.3	82.9	79.2	81.2	1.3
17	84.3	86.3	82.5	84.2	.8
18	87.2	88.8	84.4	87.2	.9
19	83.4	85.1	80.0	83.2	1.3
20	87.0	88.1	83.8	86.9	.9
21	87.1	88.6	85.1	87.0	.9
22	80.2	82.4	78.0	80.1	1.2
23	75.3	77.5	73.0	75.1	1.2
24	76.2	79.3	72.8	75.7	2.1
25	74.3	79.4	70.6	73.6	2.3
26	73.9	78.6	69.8	73.3	2.2
27	73.6	78.4	69.3	73.0	2.3
28	73.4	77.5	68.6	72.6	2.5
29	73.8	77.9	68.4	73.3	2.2
30	72.1	76.0	67.2	71.6	2.1
31	74.9	80.7	68.3	73.6	3.2
32	71.1	75.7	66.6	70.4	2.3
33	70.0	73.2	67.0	69.7	1.8
34	65.9	69.5	62.2	65.6	1.8
35	62.9	65.9	60.1	62.7	1.4
36	60.3	62.4	58.4	60.2	1.0
37	57.7	59.8	56.0	57.7	.9
38	55.0	55.0	55.0	55.0	.0
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	82.7	86.4	78.9	82.3	1.9
DBD	88.6	91.1	86.3	88.4	1.2
OASPL	94.0	95.5	92.6	94.0	.6
PNL	96.9	99.2	94.7	96.8	1.0
PNLT	97.6	100.9	94.7	97.3	1.6

180°

(Microphone Location  
Relative to Helicopter)

**TABLE G-VII**  
500 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64  
*With truck*

OCTOBER 28 1976

EVENT 45, 0 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	72.2	76.6	66.5	71.3	2.9
15	72.5	75.2	69.6	72.2	1.5
16	74.1	77.1	69.7	73.8	1.6
17	78.1	80.3	76.0	77.9	1.1
18	80.5	82.4	78.1	80.4	1.0
19	75.8	78.4	74.0	75.7	1.1
20	72.7	75.4	70.6	72.5	1.2
21	69.1	71.1	67.0	69.0	1.1
22	78.3	81.3	75.8	78.0	1.5
23	83.8	86.1	80.7	83.6	1.4
24	86.0	88.6	82.8	85.7	1.5
25	80.9	84.3	77.5	80.5	2.0
26	79.7	81.2	76.7	79.5	1.2
27	83.5	86.2	80.9	83.3	1.4
28	79.4	80.5	75.6	79.2	1.2
29	79.0	81.1	76.2	78.8	1.2
30	76.9	79.1	73.2	76.7	1.3
31	75.4	77.0	71.0	75.2	1.3
32	71.9	74.0	68.4	71.7	1.2
33	69.4	71.1	66.0	69.3	1.2
34	64.1	65.7	60.5	64.0	1.2
35	60.1	61.5	56.9	59.9	1.1
36	56.3	57.7	55.0	56.2	.7
37	55.0	55.0	55.0	55.0	.0
38	55.0	55.0	55.0	55.0	.0
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	86.9	88.5	84.7	86.8	.9
DBD	91.2	92.7	89.3	91.1	.3
OASPL	92.5	94.4	90.4	92.4	1.1
PNL	98.2	100.0	96.3	98.1	1.0
PNLT	98.2	100.0	96.3	98.1	1.0

*270°*  
*(Microphone Location  
Relative to Helicopter)*

TABLE G-VII  
500 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

With Truck

OCTOBER 28 1976

EVENT 45, 0 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	74.2	75.7	71.4	74.1	1.1
15	74.8	77.0	72.7	74.7	1.0
16	78.6	80.8	75.4	78.4	1.3
17	79.7	81.6	77.8	79.6	1.0
18	80.6	82.4	77.7	80.5	1.0
19	72.1	74.2	70.1	72.0	1.0
20	72.7	74.5	70.7	72.5	1.3
21	82.1	84.3	78.7	81.8	1.6
22	86.6	88.5	83.3	86.3	1.6
23	87.4	88.8	84.7	87.2	1.3
24	83.9	85.5	81.2	83.8	1.2
25	84.0	85.5	81.6	83.9	1.1
26	86.8	88.2	83.9	86.7	1.0
27	82.3	83.9	80.0	82.2	1.0
28	81.6	83.5	78.3	81.5	1.1
29	80.1	81.4	76.8	80.0	1.1
30	77.8	79.1	74.9	77.7	1.1
31	76.5	78.0	73.6	76.3	1.2
32	73.7	75.2	71.2	73.6	1.0
33	71.2	73.3	68.6	71.0	1.2
34	67.1	68.4	65.2	67.1	.8
35	64.1	65.5	62.6	64.1	.8
36	60.8	62.3	59.4	60.7	.8
37	57.3	59.0	56.0	57.3	.8
38	55.6	56.8	55.0	55.5	.5
39	55.3	55.8	55.0	55.3	.3
40	55.0	55.0	55.0	55.0	.0
DBA	88.7	90.1	86.2	88.6	.9
DBD	93.3	94.3	91.0	93.2	.9
OASPL	94.8	95.9	92.5	94.7	1.0
PNL	100.7	101.9	98.3	100.7	.9
PNLT	100.7	101.9	98.3	100.7	.9

90°  
(Microphone Location  
Relative to Helicopter)

**TABLE G-VII**  
500 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

*Without Truck*

OCTOBER 28 1976

EVENT 72, 0 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	66.8	69.1	63.4	66.5	1.4
15	70.8	73.4	67.9	70.6	1.4
16	74.4	78.2	70.2	73.8	2.1
17	75.8	77.9	74.4	75.7	.8
18	78.0	79.4	76.4	77.9	.8
19	67.0	69.0	65.2	66.8	1.0
20	74.9	76.6	72.8	74.9	.9
21	82.1	84.7	80.0	82.0	1.2
22	85.0	87.5	81.7	84.5	2.0
23	85.7	88.7	81.5	85.1	2.5
24	79.7	82.8	75.0	79.0	2.6
25	85.0	87.6	80.4	84.4	2.4
26	82.6	84.4	78.6	82.2	1.9
27	82.5	85.1	78.9	82.1	2.0
28	79.5	82.1	75.8	79.0	2.0
29	78.4	81.0	74.3	78.0	2.0
30	75.9	78.4	72.8	75.7	1.5
31	75.8	77.8	72.8	75.5	1.6
32	71.8	73.7	69.9	71.7	1.1
33	67.8	70.0	65.5	67.7	1.1
34	63.2	65.0	61.6	63.2	.9
35	60.0	64.5	58.0	59.7	1.4
36	56.0	59.2	55.1	55.9	.9
37	55.9	57.6	55.0	55.8	.9
38	55.0	55.1	55.0	55.0	.0
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	87.2	89.2	83.6	86.9	1.8
DBD	91.8	93.4	88.5	91.4	1.8
OASPL	93.3	94.9	90.6	93.0	1.6
PNL	98.5	100.2	95.5	98.2	1.7
PNLT	98.5	100.9	95.5	98.2	1.7

*270°*

*(Microphone Location  
Relative to Helicopter)*

TABLE G-VII  
500 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 72, 0 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	69.6	74.8	64.4	68.5	2.9
15	71.4	76.6	68.2	70.8	2.1
16	77.4	82.9	71.6	76.5	2.6
17	76.2	78.9	73.9	76.0	1.2
18	77.7	80.1	74.4	77.6	1.2
19	74.0	76.9	71.3	73.8	1.3
20	71.5	73.4	69.2	71.4	1.0
21	68.6	70.2	66.4	68.5	1.0
22	75.1	77.0	73.1	74.9	1.1
23	79.5	81.4	77.5	79.4	1.1
24	81.8	83.9	79.3	81.7	1.1
25	77.3	79.7	73.4	77.0	1.6
26	76.1	78.1	72.9	75.8	1.6
27	79.3	81.9	76.8	79.0	1.3
28	73.9	75.8	71.2	73.7	1.3
29	73.8	76.5	71.4	73.6	1.4
30	71.7	74.1	68.9	71.5	1.4
31	70.0	72.4	67.0	69.8	1.3
32	66.6	68.8	63.5	66.4	1.4
33	63.2	66.1	59.9	63.0	1.4
34	58.2	60.9	56.3	58.0	1.2
35	55.4	57.1	55.0	55.4	.6
36	55.0	55.0	55.0	55.0	.0
37	55.0	55.0	55.0	55.0	.0
38	55.0	55.0	55.0	55.0	.0
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	82.2	84.2	80.3	82.1	1.1
DBD	86.6	88.2	84.8	86.5	.9
OASPL	89.2	91.7	87.6	89.1	1.0
PNL	94.2	95.8	92.5	94.1	.9
PNLT	94.2	95.8	92.5	94.1	.9

90°

(Microphone level  
relative to Helicopter)

# TABLE G-VIII

## 500 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

*With truck*

OCTOBER 28 1976

EVENT 45, 0 DEGREES, CENTERLINE MIC. ( HARD SITE )

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	76.0	79.2	72.3	75.7	1.7
15	75.7	77.7	72.2	75.5	1.2
16	76.6	79.9	71.9	76.1	2.1
17	83.1	84.0	81.8	83.0	.6
18	82.6	83.6	80.2	82.5	.9
19	70.3	72.0	68.1	70.2	.9
20	82.9	85.3	80.7	82.8	1.1
21	87.8	90.2	83.8	87.5	1.7
22	90.5	93.3	85.0	90.0	2.2
23	88.4	90.6	83.4	88.1	2.0
24	87.0	88.3	83.3	86.8	1.4
25	92.0	93.3	89.4	91.9	1.1
26	87.6	89.0	84.6	87.5	.9
27	88.8	90.0	86.6	88.7	.8
28	85.5	86.6	83.8	85.4	.8
29	83.8	84.9	82.3	83.7	.6
30	82.5	83.6	81.0	82.4	.7
31	80.0	81.2	78.8	80.0	.6
32	77.2	78.2	76.1	77.2	.5
33	74.2	75.6	72.9	74.2	.7
34	70.8	71.8	69.8	70.8	.5
35	68.1	69.2	67.0	68.1	.6
36	64.8	66.2	63.8	64.7	.6
37	62.1	63.7	59.8	62.0	.9
38	59.4	61.6	56.6	59.2	1.2
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	92.8	93.6	91.1	92.7	.7
DBD	97.4	98.3	95.3	97.3	.9
OASPL	98.8	100.2	96.0	98.7	1.2
PNL	104.8	105.7	102.7	104.7	.8
PNLT	104.8	105.7	102.7	104.7	.8

( Helicopter Location  
Directly Overhead )

# TABLE G-VII

## 500 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

*Without truck*

OCTOBER 28 1976

EVENT 72, 0 DEGREES, CENTERLINE MIC. ( HARD SITE )

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	72.2	75.5	67.9	71.5	2.4
15	73.7	79.3	69.6	72.7	2.8
16	78.7	84.7	70.4	77.0	3.9
17	77.2	79.7	74.4	77.0	1.2
18	78.6	80.8	76.0	78.3	1.5
19	68.5	69.9	67.1	68.4	.7
20	81.0	83.2	78.6	80.8	1.3
21	86.4	87.8	83.6	86.3	1.1
22	87.9	90.3	84.6	87.5	1.9
23	85.8	88.3	82.3	85.4	2.1
24	83.8	85.6	81.0	83.6	1.4
25	88.9	91.4	84.8	88.4	2.2
26	85.0	87.3	82.4	84.8	1.4
27	86.2	88.4	82.9	85.9	1.7
28	83.1	85.3	80.4	82.9	1.5
29	79.8	81.3	78.0	79.7	1.0
30	77.5	79.1	76.4	77.5	.8
31	76.7	78.0	74.2	76.6	1.0
32	72.9	73.8	71.0	72.8	.7
33	69.3	71.8	67.3	69.0	1.5
34	65.3	66.8	62.8	65.2	1.1
35	62.1	63.9	59.8	61.9	1.2
36	58.8	60.8	56.7	58.6	1.1
37	58.1	61.6	55.8	57.8	1.4
38	55.1	55.5	55.0	55.1	.2
39	55.0	55.2	55.0	55.0	.1
40	55.0	55.0	55.0	55.0	.0
DBA	89.6	91.3	87.3	89.4	1.3
DBD	94.4	96.1	92.1	94.2	1.3
OASPL	97.2	98.8	96.0	97.2	.7
PNL	101.3	103.0	99.1	101.2	1.2
PNLT	101.4	103.0	99.1	101.3	1.1

(Helicopter Location)  
(Directly Overhead)

TABLE G-VIII  
Helicopter Noise Level Data  
SIKORSKY 564 OCTOBER 28, 1976  
With Truck

max RMS Noise Level - dBA re 20  $\mu$ Pa

HELICOPTER OPERATION	RUN NUMBER	MICROPHONE OFFSET TO THE WEST		MICROPHONE OFFSET TO THE EAST	
		150M	75 M.	75 M.	150M
5 FT. HOVER 0°	35	95.3	103.0 (270°)	91.0 (90°)	87.3
5 FT. HOVER 45°	36	95.8	102.8 (225°)	96.8 (45°)	87.3
5 FT. HOVER 90°	37	99.5	104.0 (180°)	96.5 (0°)	86.3
5 FT. HOVER 135°	38	101.8	105.8 (135°)	96.3 (315°)	88.0
5 FT. HOVER 180°	39	98.3	101.0 (90°)	94.3 (270°)	90.3
5 FT. HOVER 225°	40	91.0	97.3 (45°)	97.0 (225°)	87.8
5 FT. HOVER 270°	41	89.5	97.5 (0°)	92.0 (180°)	84.8
5 FT. HOVER 315°	42	93.3	99.5 (315°)	93.8 (135°)	83.0
500 FT. HOVER 0°	45	88.0	93.3 (270°)	92.8 (90°)	91.0
500 FT. HOVER 90°	46 47	87.5 88.8 (180°)	92.5 94.0 *	91.8 93.5 *	93.5 91.8 (0°)

\* Microphone at centerline



TABLE G-VIII  
Helicopter Noise Level Data

SIKORSKY 564

OCTOBER 28, 1976

With truck

max RMS Noise Level - dBA @ 20 m Pa

HELICOPTER OPERATION	RUN NUMBER	MICROPHONE OFFSET TO THE WEST 150M CENTER LINE		MICROPHONE OFFSET TO THE EAST 150M CENTER LINE	
		OVER Concrete	OVER Concrete	OVER Grass	OVER Concrete
3° GLIDE SLOPE	70	85.5	89.0	88.0	85.8
	71	84.8	87.3	85.8	85.8
6° GLIDE SLOPE	51	86.0	86.8	84.0	83.3
	52	85.0	88.8	86.8	81.8
9° GLIDE SLOPE	43	87.0	89.5	87.5	84.5
	44	86.8	87.8	87.0	83.0
60 KT LEVEL FLYOVER	49	84.0	84.8	82.3	84.8
	50	84.8	85.0	84.3	85.5
85 KT LEVEL FLYOVER	55	84.0	84.0	82.3	84.3
	66	87.5	85.8	84.8	86.0
95 KT LEVEL FLYOVER	67	87.8	87.0	86.3	87.3
	68	86.5	86.8	85.3	85.3
	69	88.0	87.0	86.5	87.3

TABLE G-VIII  
Helicopter Noise Level Data  
SIKORSKY 564 OCTOBER 28, 1976  
Without truck

max RMS Noise Level - dBA re 20  $\mu$ P<sub>a</sub>

HELICOPTER OPERATION	RUN NUMBER	MICROPHONE OFFSET TO THE WEST		MICROPHONE OFFSET TO THE EAST	
		150M	75 M	75 M	150M
5 Ft. HOVER 0°	86	86.8	90.3 (270°)	91.0 (90°)	85.0
5 Ft. HOVER 45°	87	88.5	91.8 (225°)	93.5 (45°)	85.5
5 Ft. HOVER 90°	88	93.5	97.3 (180°)	93.5 (0°)	85.0
5 Ft. HOVER 135°	89	99.3	99.8 (135°)	97.5 (315°)	85.0
5 Ft. HOVER 180°	90	89.5	91.5 (90°)	94.8 (270°)	89.8
5 Ft. HOVER 225°	92	88.5	92.0 (45°)	96.3 (225°)	92.3
5 Ft. HOVER 270°	93	89.0	91.5 (0°)	93.0 (180°)	96.3
5 Ft. HOVER 315°		—	—	—	—
500 Ft. HOVER		—	—	—	—
500 Ft. HOVER		—	—	—	—

TABLE G-VIII  
Helicopter Noise Level Data

SIKORSKY S 64

OCTOBER 28, 1976

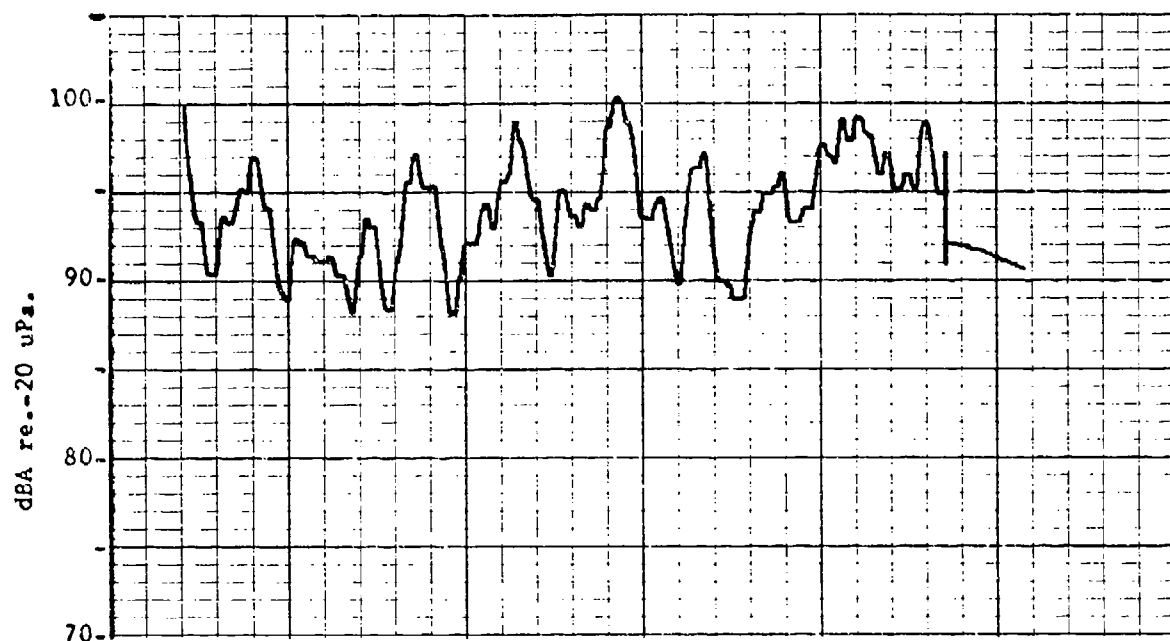
Without truck

max R<sub>MS</sub> Noise Level - dBA @ 20 m Pa

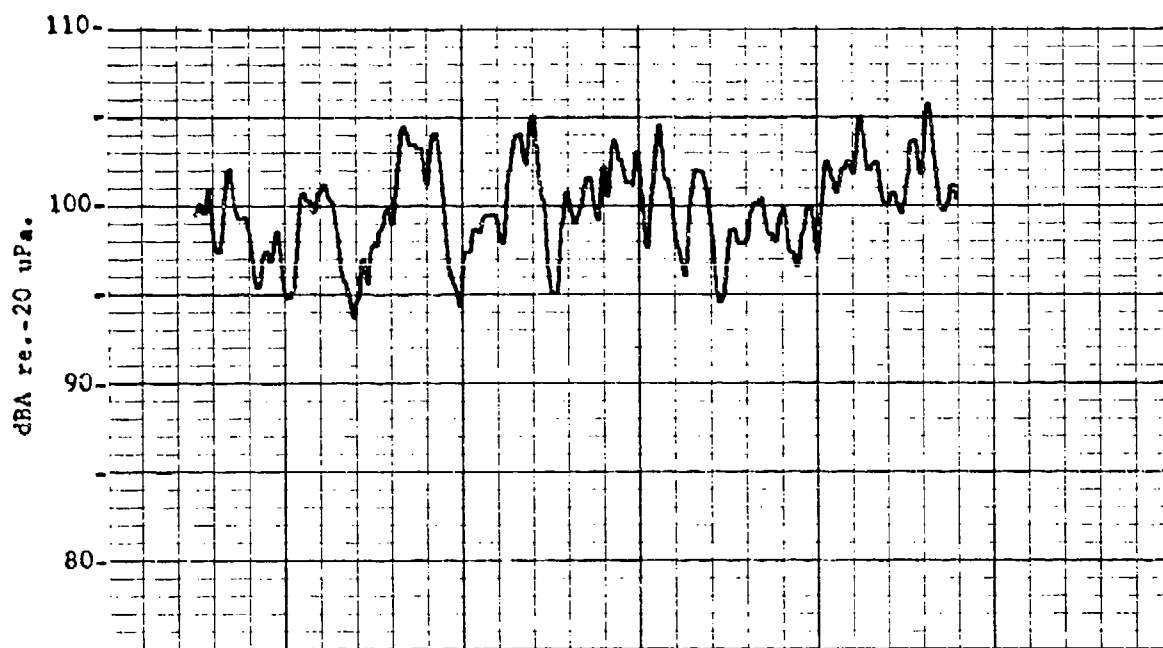
HELICOPTER OPERATION	RUN NUMBER	MICROPHONE OFFSET TO THE WEST 150M CENTER LINE		MICROPHONE OFFSET TO THE EAST CENTER LINE 150M	
		OVER Concrete	OVER Concrete	OVER Grass	OVER Concrete
3° GLIDE SLOPE		—	—	—	—
6° GLIDE SLOPE	74	86.5	85.8	83.8	82.8
	75	86.0	86.5	83.5	83.5
9° GLIDE SLOPE		—	—	—	—
85 KT LEVEL FLYOVER	76	86.5	87.3	85.0	83.0
	77	85.0	87.3	83.8	83.5
95 KT LEVEL FLYOVER	78	85.5	86.5	84.5	82.0
	79	86.3	89.8	85.8	86.0
105 KT LEVEL FLYOVER	80	87.5	89.3	85.3	83.8
	81	89.0	89.5	86.8	82.8

TABLE G-IX

← 10 SEC →



150 METERS WEST OF CENTER LINE

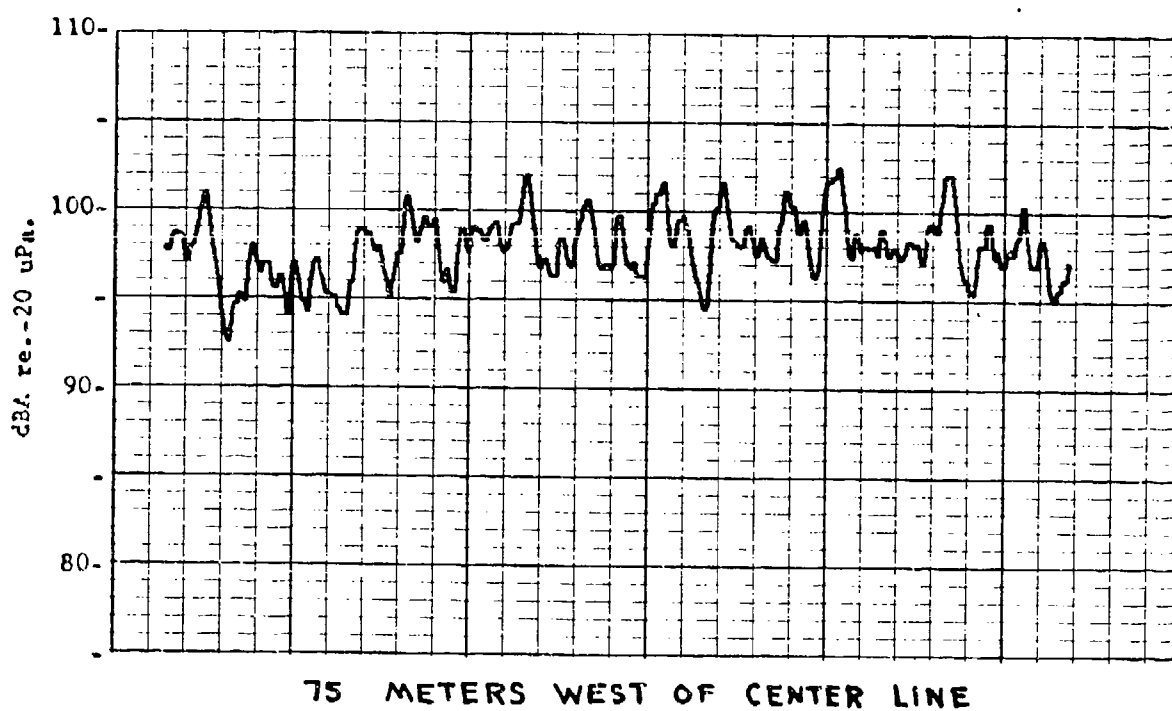
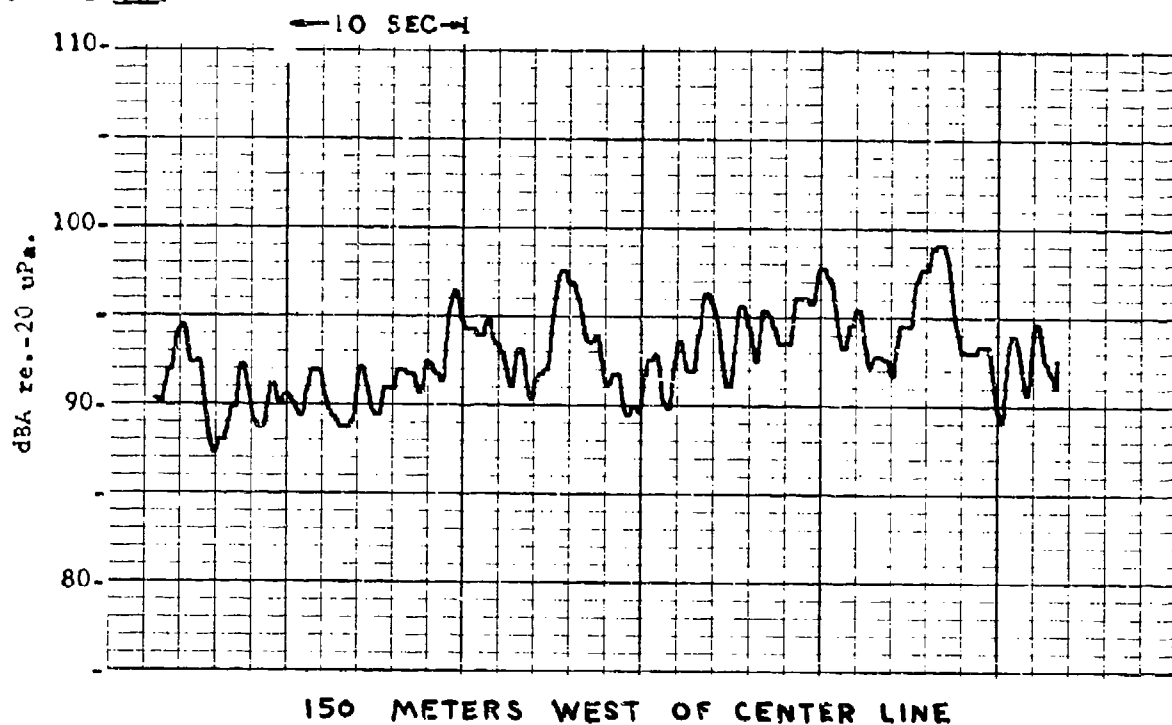


75 METERS WEST OF CENTER LINE

NOISE LEVEL TIME HISTORIES  
SIKORSKY S-64 HELICOPTER  
90° HOVER - 5 FT.

RUN 37

TABLE G-IX



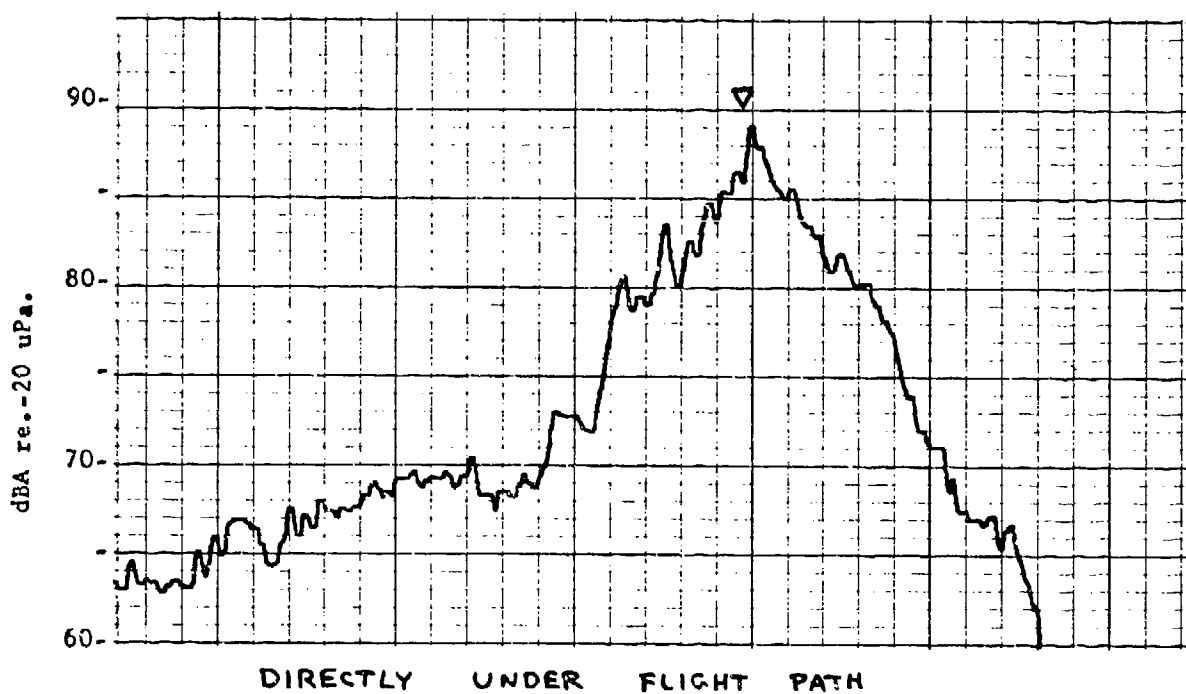
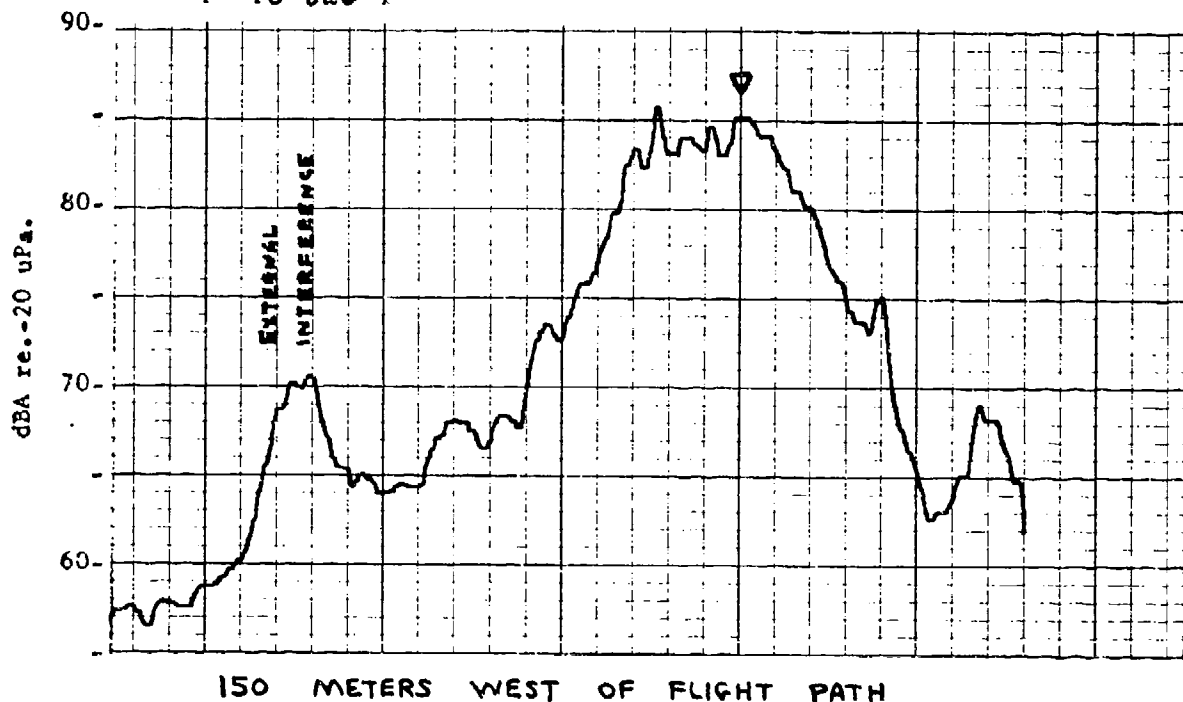
NOISE LEVEL TIME HISTORIES  
SIKORSKY S-64 HELICOPTER  
180° HOVER - 5 FT.

RUN 39

TABLE G-IX

▽ = CENTER CROSSING

← 10 SEC →

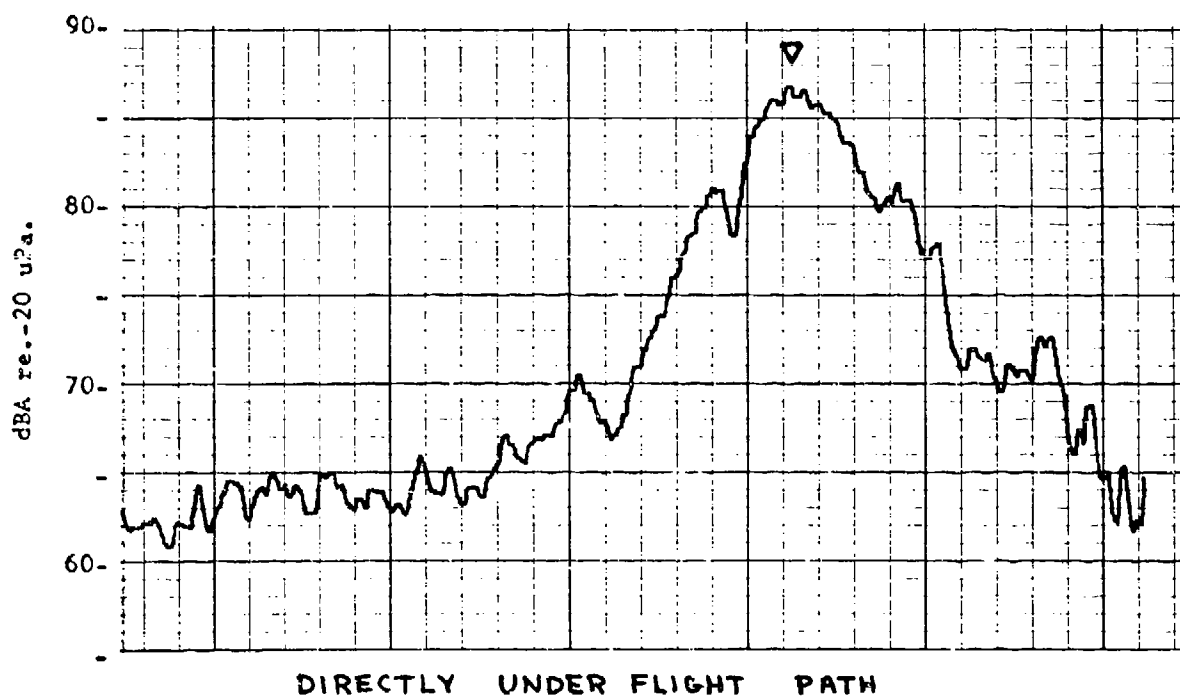
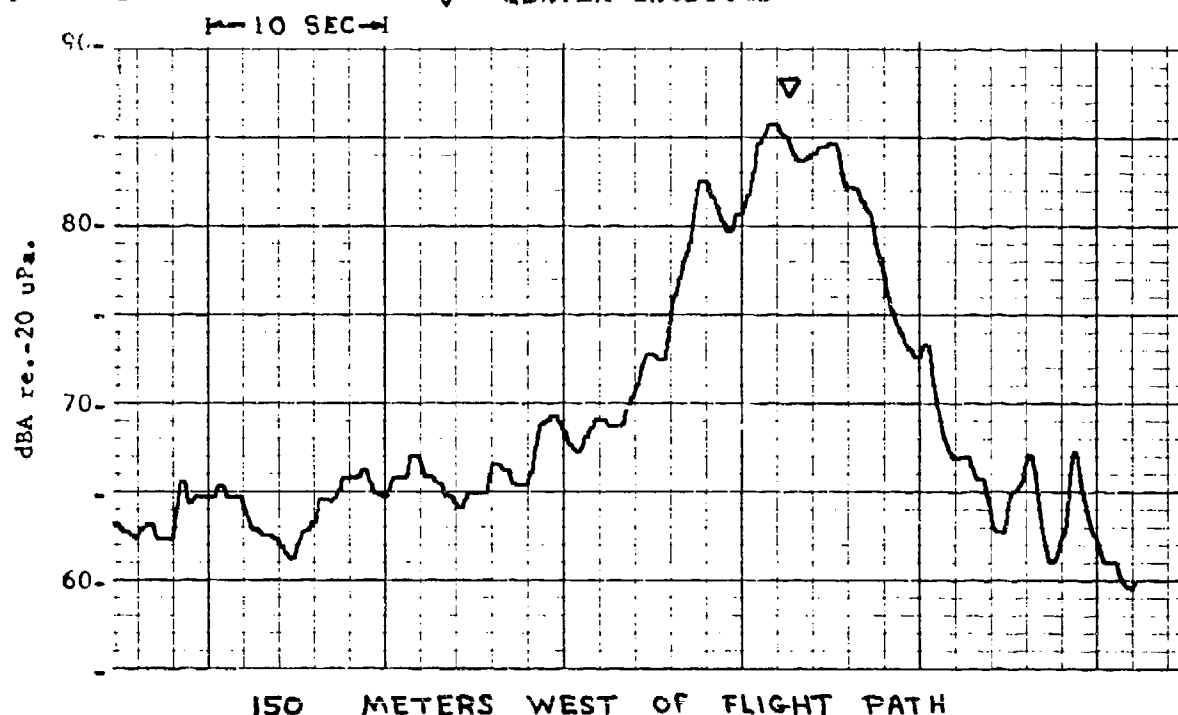


NOISE LEVEL TIME HISTORIES  
SIKORSKY S-64 HELICOPTER  
3° APPROACH

RUN 70

TABLE G-IX

▽ = CENTER CROSSING

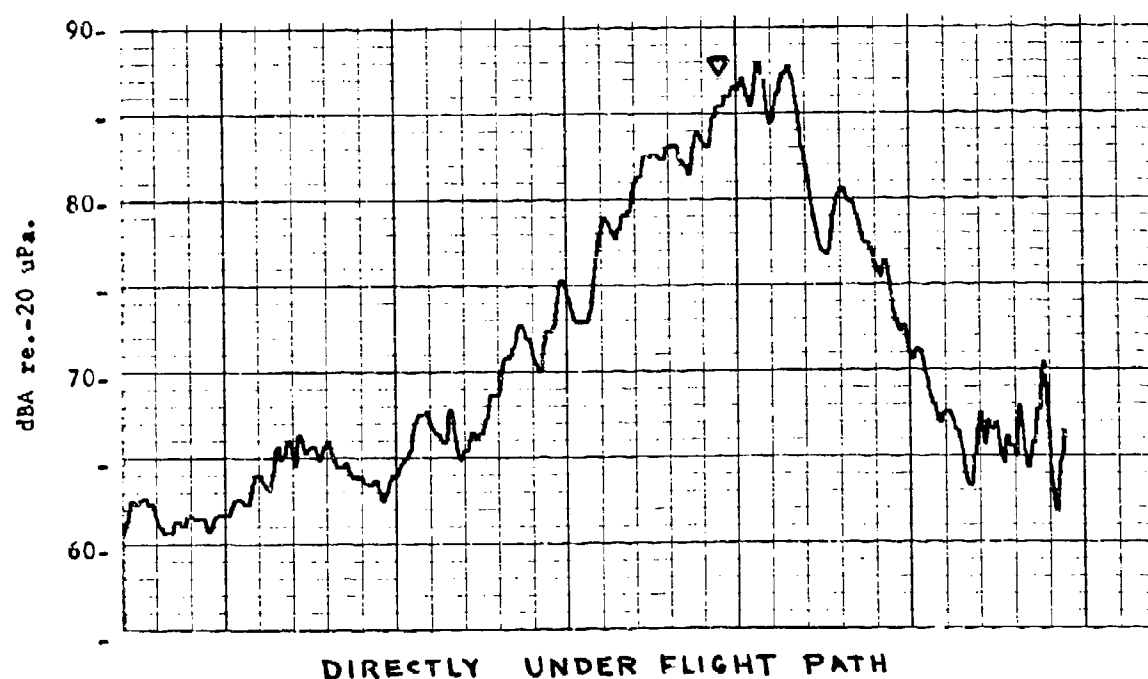
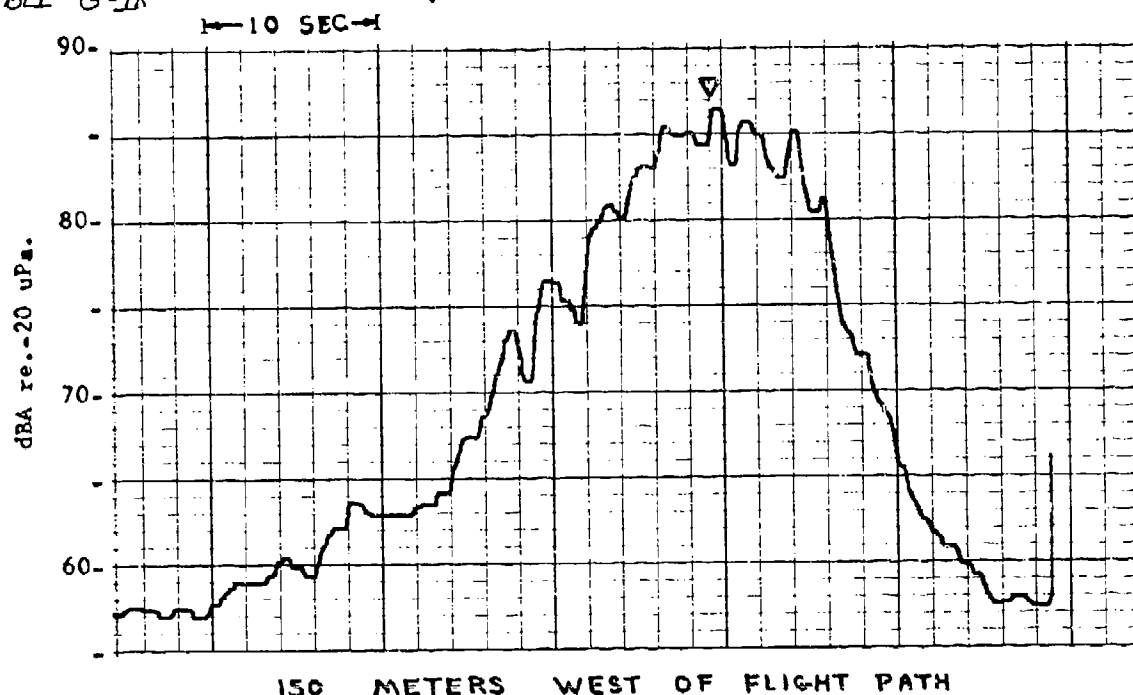


NOISE LEVEL TIME HISTORIES  
SIKORSKY S-64 HELICOPTER  
6° APPROACH

RUN 51

TABLE G-IX

▽ = CENTER CROSSING



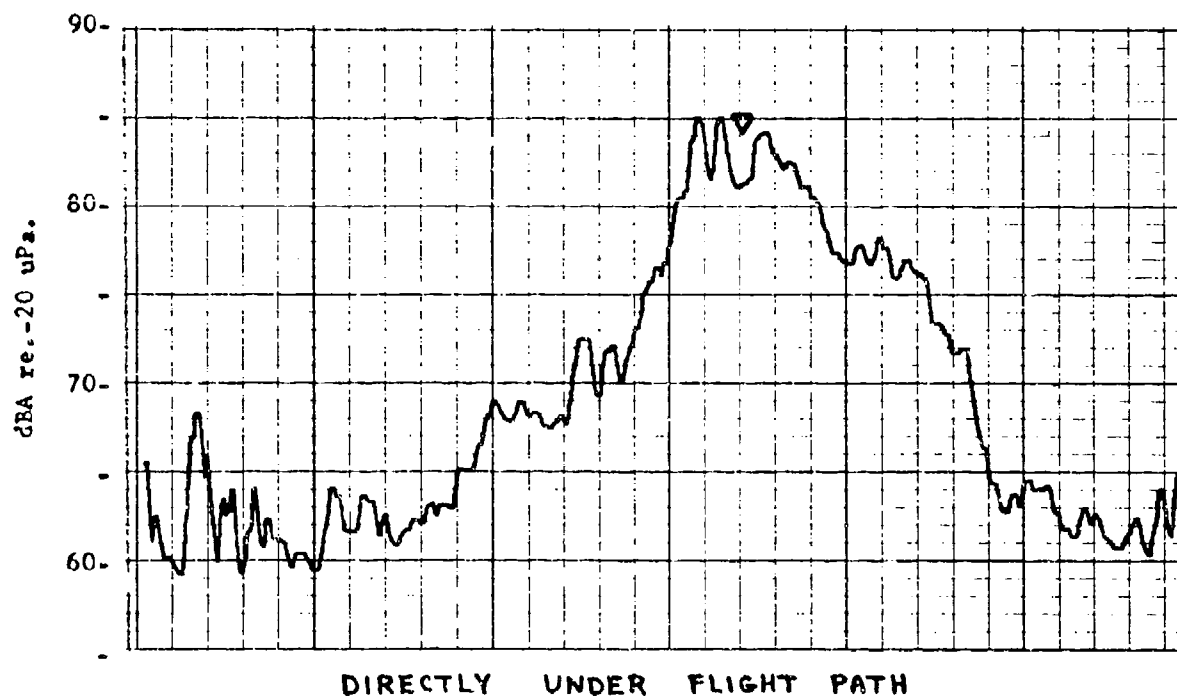
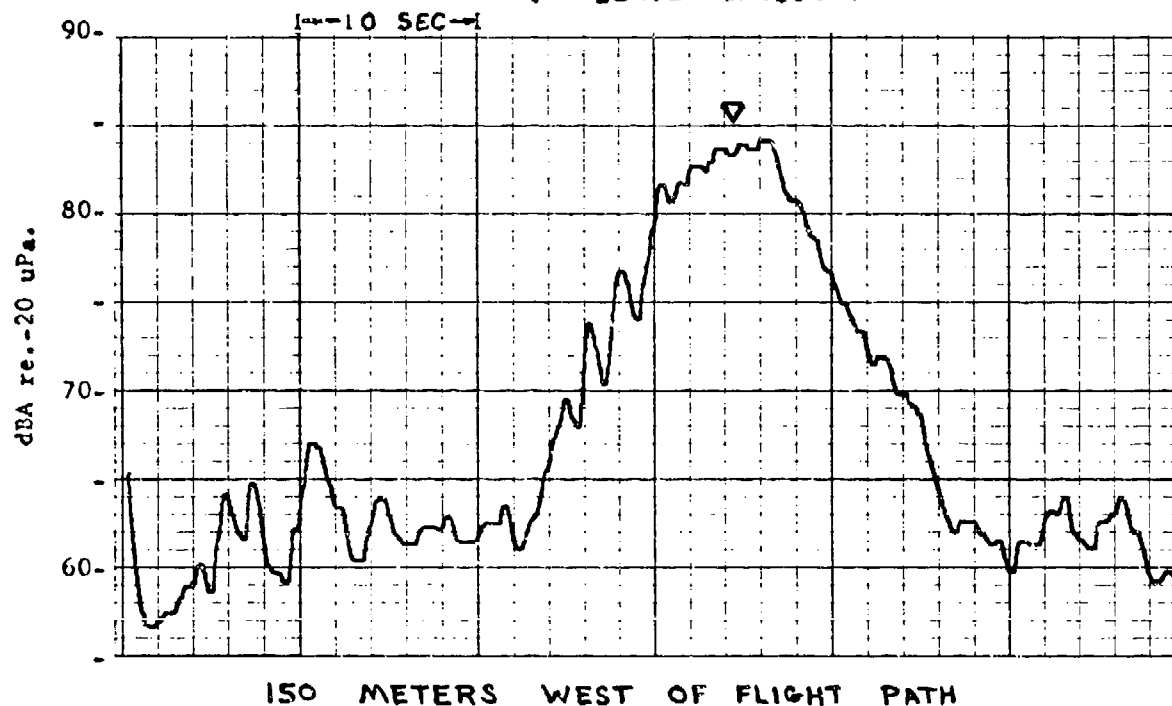
NOISE LEVEL TIME HISTORIES  
SIKORSKY S-64 HELICOPTER  
9° APPROACH

RUN 44



TABLE G-IX

▽ = CENTER CROSSING

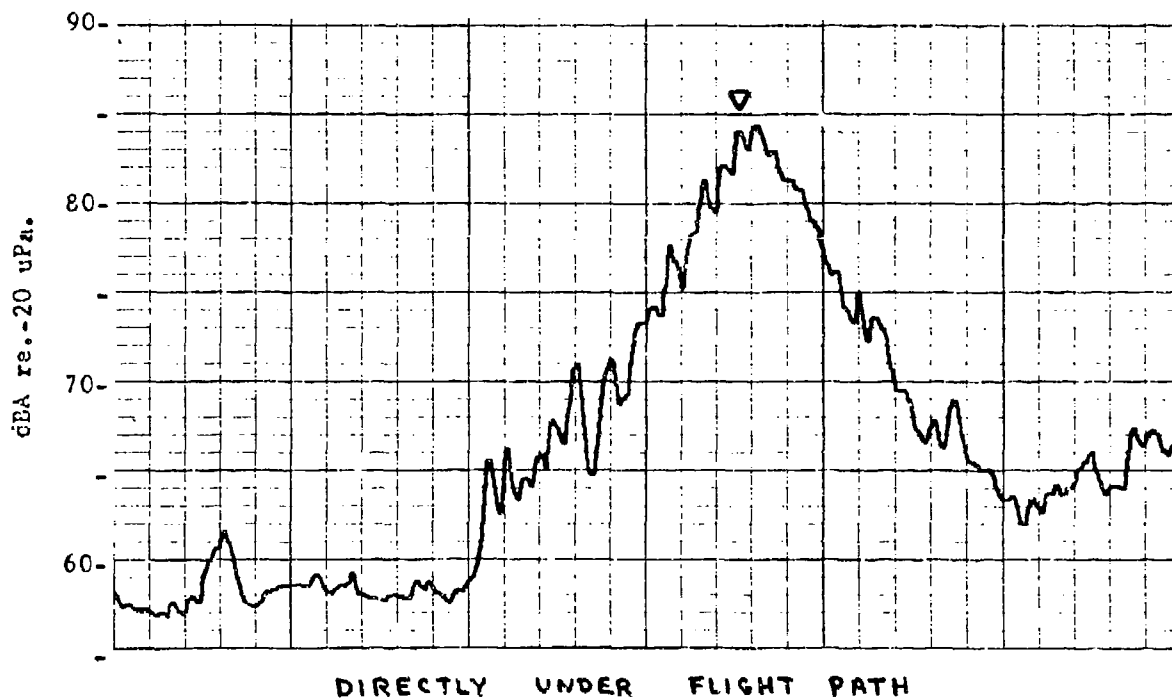
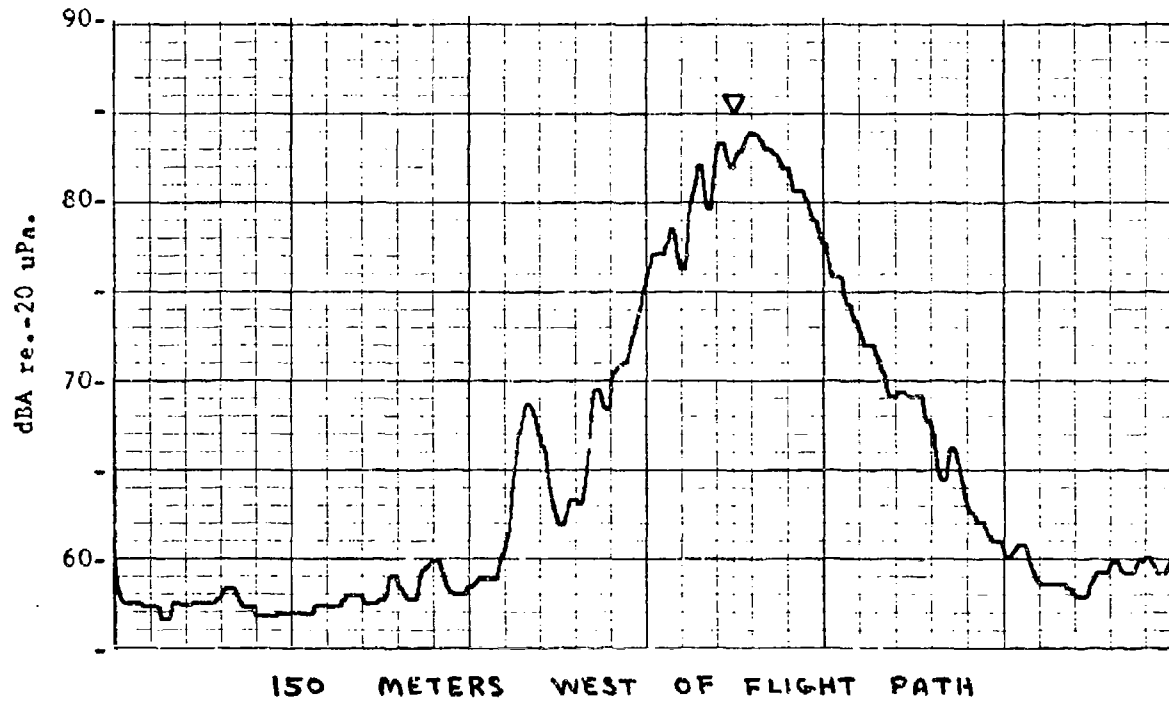


NOISE LEVEL TIME HISTORIES  
SIXORSKY S-64 HELICOPTER  
60 KTS LEVEL FLYOVER

RUN 50

TABLE G-IX

10 SEC  $\nabla$  = CENTER CROSSING



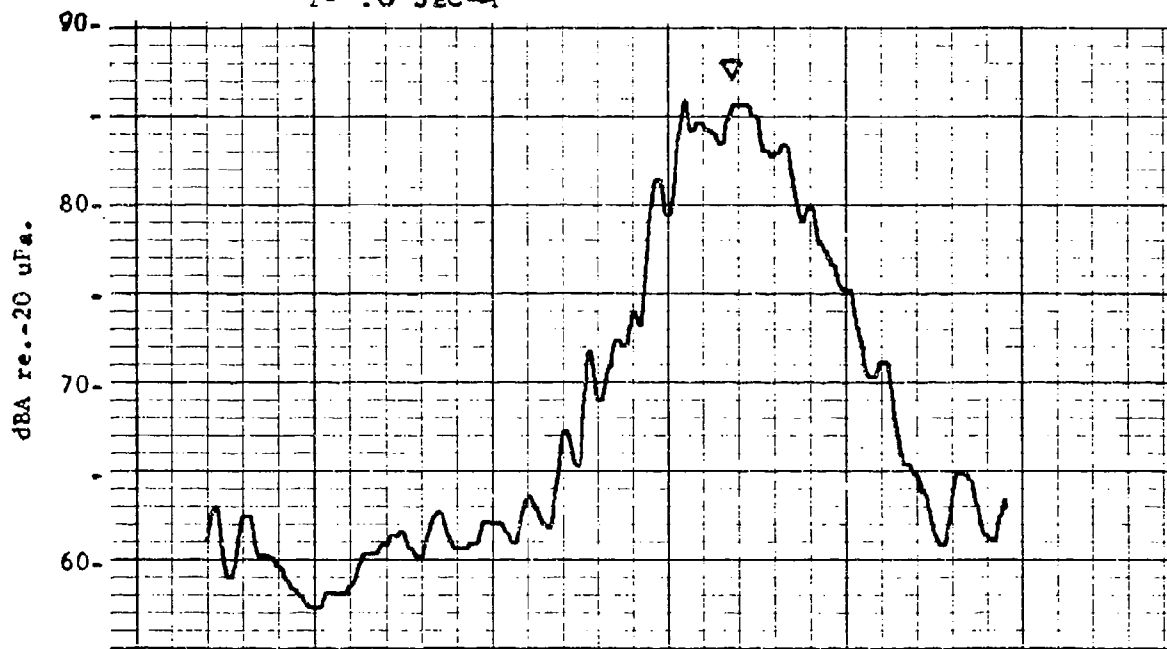
NOISE LEVEL TIME HISTORIES  
SIKORSKY S-64 HELICOPTER  
85 KTS LEVEL FLYOVER

RUN 55

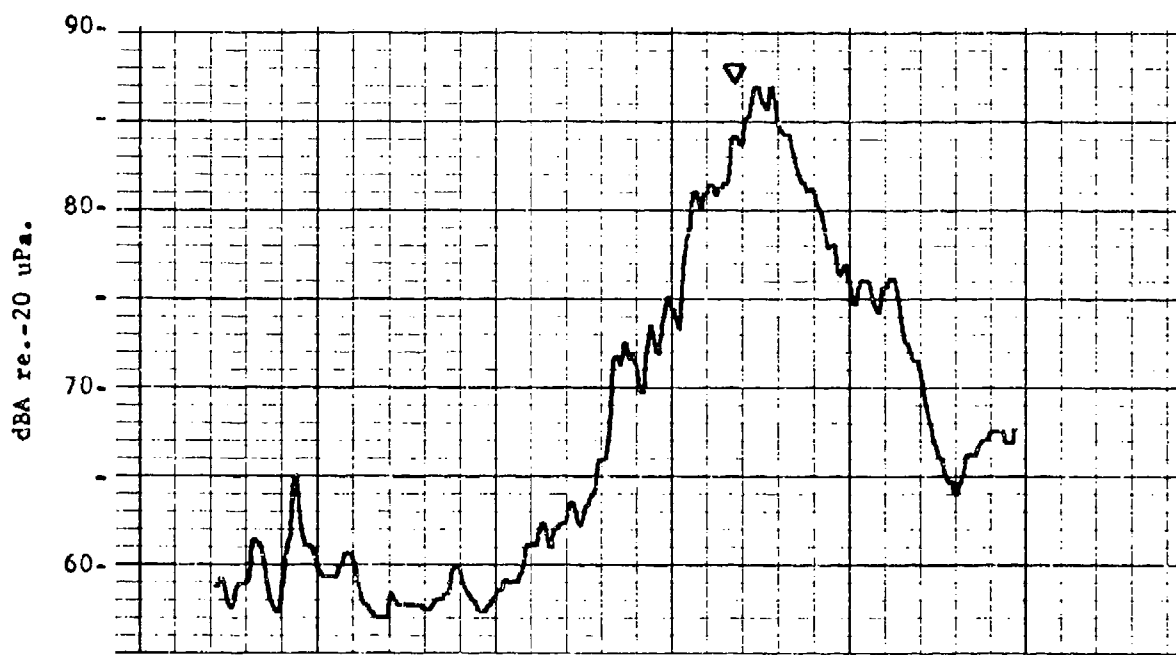
TABLE G-IX

▽ = CENTER CROSSING

← 10 SEC →



150 METERS WEST OF FLIGHT PATH



DIRECTLY UNDER FLIGHT PATH

NOISE LEVEL TIME HISTORIES  
SIKORSKY S-64 HELICOPTER  
LEVEL FLYOVER - 95 KTS

RUN 68

# DATA TABLE H

Boeing Vertol "Chinook" (CH-47C)

TEST DATE: 10-13-76

TEST SITE: DULLES AIRPORT

SECTION - H	CONTENT	PAGE #
I	RUN LIST	680
II	GROUND AND FLIGHT LOG DATA	683
III	METEOROLOGICAL DATA	686
IV	LEVEL FLYOVER AND APPROACH NOISE DATA	687
V	TIME HISTORIES	689
VI	1/3-OCTAVE BAND SPECTRA--FLYOVER AND APPROACH	726
VII	1/3-OCTAVE BAND SPECTRA--5 FOOT HOVER	763
VIII	MAXIMUM dBA NOISE LEVEL (ALL RUNS)	785
IX	SELECTED dBA TIME HISTORIES--GRAPHIC PLOTS	788

THE NOISE LEVELS PRESENTED IN SECTIONS IV, V AND VI  
HAVE BEEN TABULATED FOR THE SELECTED RUNS AND MICROPHONE  
LOCATIONS INDICATED ON THE FOLLOWING PAGE.

TABLE H-I

## LIST OF RUNS SELECTED FOR ANALYSIS

RUN#	TEST CONDITION	MICROPHONE LOCATION			
		WEST		EAST	
		150 m SIDELINE	CENTER LINE	CENTER LINE	150m SIDELINE
12	6° Approach 60 Kts	X		X	X
17	Level Flyover 60 Kts			X	
18	↓			X	
20	9° Approach 60 Kts			X	
22	Level Flyover 100 Kts	X		X	X
23	↓	X		X	X
24	141 Kts	X	X	X	X
25	↓	X	X	X	X
26	↓	X	X	X	X
27	↓	X	X	X	X
28	150 Kts	X		X	X
29	↓	X		X	X
30	126 Kts			X	
31	↓			X	
35	3° Approach 60 Kts			X	
	Microphone Locations	Over Transpo Site Surface	Over Plywood	Over Transpo Site Surface	Over Transpo Site Surface

#### GENERAL COMMENTS

- o The weather conditions during the test were excellent with very low winds and clear and sunny skies.
- o Because the "Chinook's" gross weight during testing was greatly effected by its rate of fuel consumption, a table has been inserted which provides a log of the gross weight as a function of time.
- o No EPNL levels were calculated for the centerline microphones of run 22 and 23 because the microphone gains were set such that the lower limit of the dynamic range of the data recording system was not low enough to include the 10 dB down points necessary to calculate the EPNL levels.
- o During the 5 foot hover portion of the test, the down-wash of the "Chinook" was so strong that it knocked over both the East and West 246 feet (75 meter) sideline microphones. As a result, no data was obtained at these locations.

II-H 37891

Boeing Vertol

Helicopter Model: CH-47C Chinook

Registration Number:

Test Date: Oct. 13, 1926

Time	Target Conditions		Actual Conditions				Ground Weather (10 ft)			Comments			
	Type	Velocity M.P.H.	Altitude M.F.S.	dB	Heading	Air Speed	R.O. of Com. Target	R.O. of M.P.H. or Altitude M.F.S.	Temp		RH	Wind Speed	Wind Direction
1 11:05	Hover	0	5 ft	→	0° N	0	0	56.5	5 ft	24.5	12°C		good run possible interference at very end of run.
2 11:06					0° N						↓		
3 11:07					45° E						13		
4 11:08					90° E								
5 11:09					135°								
6 11:10					180° S								
7 11:11					225°								
8 11:12					270°								
9 11:13					315°								
10 11:14					0° N								
11 11:40	6° App.	60 kts	400 ft	→	S	60 kts	600 ft	26.7%	400 ft	24.5	15°C		Abort
12 11:44								26			↓		
13 11:50								28					
14 11:54								28					
15 11:59	Hover	0	500 ft	↓	180° S	0	0	64%	500 ft	24.5	15°C		
16 11:59.5					70° E			60			↓		
17 12:01	Level Flyover	60 kts	500 ft	↓	S	60 kts	0	49%	500 ft	24.5	23°C		
18 12:05								40			↓		
19 12:10	9° App.	60 kts	400 ft	↓	S	60 kts	800 ft	34%	400 ft	24.5	14°C		
20 12:14								900			↓		
21 12:17								900			16°C		
22 12:24	Level Flyover	100 kts	500 ft	↓	S	100 kts	0	42%	500 ft	24.5	15°C		"Chinook" made it impossible to take readings at the stored location - 100 ft North of the target (flms 1-10) because the downwash of the big In addition, the downwash also
23 12:36											↓		
No Sound	Level Flyover	100 kts	500 ft	↓	S	100 kts	0	42%	500 ft	24.5	15°C		

TABLE H-II Ground and Flight Log Data

Helicopter		Boeing Vertol		Registration		Numbers		Ground Weather		Wind		Comments
Model	CH-47 C "Chinook"	Model	CH-47 C	Model	CH-47 C	Model	CH-47 C	Model	CH-47 C	Model	CH-47 C	
Time	Target Conditions	Actual Conditions	Heading	Air Speed	Rate of Turn	Altitude	Altitude	Temp	Humidity	Speed	Direction	Comments
Type	Velocity	Altitude	Altitude	Altitude	Altitude	Altitude	Altitude	Altitude	Altitude	Altitude	Altitude	
24	12:30	141 kts	500 ft	90.0	90.5	141 kts	0	58%	500 ft	245	15°C	Abort
25	12:34	141 kts	500 ft	90.5	90.5	141 kts	0	64	500 ft	245	16°C	
Stopped for Concord Flight												
26	1:28	141 kts	500 ft	89.0	89.5	141 kts	0	66	500 ft	245	19°C	Abort
27	1:31	141 kts	500 ft	89.5	89.5	141 kts	0	66	500 ft	245	19°C	
28	1:35	141 kts	500 ft	89.0	89.5	141 kts	0	72	500 ft	245	20°C	Abort
29	1:39	141 kts	500 ft	89.3	89.5	141 kts	0	73	500 ft	245	20°C	
30	1:42	141 kts	500 ft	89.0	89.5	141 kts	0	54	500 ft	245	20°C	Abort
31	1:46	141 kts	500 ft	89.0	89.5	141 kts	0	54	500 ft	245	20°C	
32	1:51	141 kts	500 ft	85.6	85.6	141 kts	0	36%	500 ft	245	20°C	Abort
33	1:53	141 kts	500 ft	85.6	85.6	141 kts	0	34%	500 ft	245	20°C	
34	1:56	141 kts	500 ft	86.5	86.5	141 kts	0	34%	500 ft	245	20°C	Abort
35	2:00	141 kts	500 ft	87.0	87.0	141 kts	0	34%	500 ft	245	20°C	

Abort



BOEING VERTOL "CHINOOK" CH-47C

LOG OF GROSS WEIGHT vs. TIME

<u>Time</u>	<u>Run #</u>	<u>Fuel (lbs.)</u>	<u>Total Gross Weight</u>
11:00	1	6900	41,000
11:15	9	6100	40,200
11:38	11	5300	39,400
11:50	13	4800	38,900
12:05	18	4300	38,400
12:21	22	3700	37,800
12:32	25	3300	37,400

----- REFUEL -----

1:25	26	6900	41,000
1:36	28	6300	40,400
1:42	30	6000	40,100
1:56	34	5500	39,600

*TABLE H-III*  
METEOROLOGICAL DATA  
DULLES INTERNATIONAL AIRPORT  
OCTOBER 13, 1976

TIME (Hours)	TEMP. (°F)	BAR. PRESS. (mmHg)	REL. HOM. (%)	WIND SPEED (mph)	WIND DIRECTION (Degrees)	REMARKS
1100	57		64	3-4	190	Sky-Clear
1115	58		61	9-11	170	
1130	60		60	3-7	170	
1145	61		56	4-6	190	
1200	62		55	4-5	180	
1215	64	754	50	4-5	180	
1230	64		50	3-6	170	
1245	66		48	5-6	200	
1300	68		44	5-6	180	
1315	68		42	4-6	190	
1330	70		40	5-7	190	
1345	74		37	5-7	190	
1400	78	748	35	4-7	180	
1415	79		34	4-5	180	
1430	79		34	7-8	210	
1445	79		33	9-10	200	
1500	80		33	11-14	200	
1515	80		32	7-12	210	
1530	80		32	9-16	190	

TABLE H-IV

HELICOPTER APPROACH AND FLYOVER NOISE DATA

JEKIDOL CH-47 C

OCTOBER 13, 1976

MICROPHONE OFFSET 150 METERS WEST  
(LEVELS-DB RE 20 MICRO PA)

EVENT	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	LEL	DJR(A)	DJR(P)	IC
12	103.8	91.1	96.8	99.4	104.0	105.8	85.0	29.5	29.5	1.8
22	97.8	83.7	89.3	96.1	97.5	98.0	79.7	19.5	24.5	1.3
23	97.3	80.9	87.8	95.6	95.5	96.3	77.6	25.0	27.0	1.1
24	104.8	89.7	97.6	104.7	105.0	105.4	86.5	17.5	18.0	1.7
25	105.8	93.7	100.6	106.3	107.8	108.4	89.4	12.5	13.0	1.3
26	106.1	91.2	98.2	104.8	106.4	107.3	87.4	17.0	16.0	1.2
27	106.5	94.2	99.5	106.5	107.7	108.5	89.5	15.0	16.5	1.1
28	106.5	95.5	103.4	109.7	111.0	111.0	91.5	8.5	9.0	.0
29	107.0	96.1	103.2	109.7	110.9	110.9	92.4	8.5	9.5	.0

MICROPHONE OFFSET 150 METERS EAST  
(LEVELS-DB RE 20 MICRO PA)

EVENT	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNLT(M)	LEL	DJR(A)	DJR(P)	IC
12	103.1	86.4	91.8	98.5	99.6	101.1	81.1	54.0	62.0	1.5
22	100.6	86.0	90.7	97.3	98.6	100.4	81.0	25.5	28.5	1.8
23	97.0	79.6	88.7	96.7	95.7	95.7	76.7	26.0	26.5	.0
24	103.9	89.9	97.5	103.9	104.3	104.3	85.5	21.0	19.5	.0
25	104.0	91.4	99.4	105.4	105.5	105.8	86.7	16.0	13.0	1.7
26	106.0	93.1	100.0	106.7	108.1	108.1	89.0	11.5	12.0	.0
27	107.3	95.6	102.0	107.9	110.6	110.6	91.4	10.0	10.5	.0
28	109.0	99.5	105.8	110.3	113.3	114.5	95.7	6.0	7.0	1.2
29	109.1	98.7	105.4	109.9	112.6	112.6	95.7	7.0	8.0	.0

NOT AVAILABLE COPY

TABLE H-IV

HELICOPTER APPROACH AND FLYOVER NOISE DATA

VERIOL CH-47 C

OCTOBER 13, 1976

CENTERLINE MICROPHONE (SOFT SITE)  
(LEVELS-DB RE 20 MICRO PA)

EVENT	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNL(M)	LEQ	DUR(A)	DUR(P)	TC
12	107.6	95.8	102.3	105.7	108.6	108.1	91.8	15.5	21.0	.0
17	105.6	90.0	96.0	100.8	104.1	104.1	85.0	36.5	38.5	.0
18	106.9	91.5	97.0	100.8	105.0	105.0	86.2	42.0	44.5	.0
20	107.5	95.1	101.8	105.3	108.2	108.2	90.7	18.0	23.0	.0
22	-----	88.6	93.1	97.8	101.5	101.5	83.2	22.0	-----	.0
23	-----	84.2	91.2	98.1	99.7	99.7	79.6	26.5	-----	.0
24	106.5	91.1	99.1	105.6	106.1	106.1	87.3	20.0	20.5	.0
25	106.8	92.7	100.7	106.5	108.1	108.1	88.0	17.5	18.0	.0
26	106.4	92.9	100.9	106.1	107.4	107.4	88.1	17.0	17.0	.0
27	108.9	96.0	103.3	108.6	110.0	111.1	91.7	14.0	14.0	1.4
28	109.0	97.6	104.9	109.8	111.4	111.4	92.7	13.0	13.5	.0
29	111.3	99.3	106.6	111.1	113.5	113.5	95.4	13.0	13.5	.0
30	103.5	88.8	98.0	104.9	105.1	105.1	84.4	16.5	16.5	.0
31	104.2	87.9	96.3	103.3	103.9	103.9	85.4	17.0	18.5	.0
35	108.1	94.4	100.8	104.6	107.6	107.6	90.6	19.0	46.0	.0

CENTERLINE MICROPHONE (HARD SITE)  
(LEVELS-DB RE 20 MICRO PA)

EVENT	EPNL	DBA(M)	DBD(M)	OASPL	PNL(M)	PNL(M)	LEQ	DUR(A)	DUR(P)	TC
24	106.8	90.7	98.9	106.3	106.0	106.0	87.6	20.5	20.5	.0
25	107.5	94.4	103.1	108.3	109.2	109.2	89.0	17.5	18.0	.0
26	106.6	92.6	100.8	106.3	107.5	108.1	88.2	17.5	17.5	1.1
27	108.7	95.2	103.1	109.4	110.6	110.6	91.8	14.0	14.0	.0

---- INSUFFICIENT DATA - 10 DB DOWN POINTS NOT DISCERNIBLE ABOVE  
AMBIENT LEVELS

# TABLE H-IV

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 12, 6 DEGREE APPROACH, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	75.2	83.0	92.3	91.6	92.8	16.4	7.8
3	77.1	84.3	92.1	92.8	92.8	15.7	7.2
5	80.8	85.7	92.3	94.1	95.1	13.3	4.9
7	80.9	86.2	92.5	94.7	95.8	13.8	5.3
9	77.7	84.7	92.4	93.1	94.3	15.4	7.0
11	75.8	83.9	91.9	92.1	92.1	16.3	8.1
13	75.7	82.7	92.2	91.0	91.0	15.3	7.0
15	79.3	84.3	92.8	92.8	92.8	13.5	5.0
17	83.0	88.2	94.4	96.2	96.2	13.2	5.2
19	81.9	88.2	94.6	96.3	97.6	14.4	6.3
21	82.4	87.4	94.1	95.7	97.0	13.3	5.0
23	81.6	86.7	94.2	94.8	96.0	13.2	5.1
25	82.4	87.0	94.7	95.9	97.5	13.5	4.6
27	84.6	88.6	94.2	97.0	98.3	12.4	4.0
29	85.9	90.7	94.7	98.4	98.4	12.5	4.8
31	86.4	91.3	95.2	98.4	100.3	12.0	4.9
33	86.0	91.2	95.8	98.5	100.9	12.5	5.2
35	87.2	92.1	95.4	99.6	99.6	12.4	4.9
37	87.0	91.5	95.3	99.1	99.1	12.1	4.5
39	88.4	93.2	96.6	100.6	100.6	12.2	4.8
41	90.7	96.0	99.0	103.7	105.7	13.0	5.3
42	91.1	96.8	99.4	104.0	105.8	12.9	5.7
44	88.1	94.6	98.3	101.4	101.4	13.3	6.5
46	86.0	92.7	98.1	100.2	100.2	14.2	6.7
48	84.6	91.4	97.7	99.1	99.1	14.5	6.8
O.H. 50 → 51	84.0	90.8	97.2	98.7	98.7	14.7	6.8
52	84.8	91.1	96.7	99.1	99.1	14.3	6.3
54	84.5	90.2	95.7	98.1	98.1	13.6	5.7
56	85.2	91.3	95.6	99.1	99.1	13.9	6.1
58	85.4	91.2	94.9	99.1	99.1	13.7	5.8
60	82.9	88.4	93.1	96.5	97.5	13.6	5.5
62	81.4	86.8	91.4	94.8	94.8	13.4	5.4
64	81.2	86.3	91.3	94.7	95.9	13.5	5.1
66	79.7	85.2	90.8	93.3	94.4	13.6	5.5
68	76.7	82.2	88.1	90.3	91.7	13.6	5.5
70	73.8	79.7	86.7	88.2	89.4	14.4	5.9
72	71.5	78.0	85.8	86.3	86.3	14.8	6.5

# TABLE H-IV

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 22, 100 KT. FLY BY, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	64.8	77.5	88.0	85.0	85.0	20.2	12.7
3	66.0	78.6	89.0	86.1	86.1	20.1	12.6
5	67.6	79.5	89.7	86.9	86.9	19.3	11.9
7	70.4	80.7	90.8	88.4	88.4	18.0	10.3
9	71.4	81.6	91.6	89.4	89.4	18.0	10.2
11	71.7	82.1	92.1	89.5	91.2	17.8	10.4
13	71.2	81.7	92.0	89.1	89.1	17.9	10.5
15	71.0	81.4	91.8	89.0	89.0	18.0	10.4
17	71.6	82.1	92.5	89.8	89.8	18.2	10.5
19	75.6	84.4	93.7	91.9	91.9	16.3	8.8
21	77.5	85.5	94.5	93.2	93.2	15.7	8.0
23	77.6	85.4	94.5	93.3	94.3	15.7	7.8
25	78.4	85.4	94.3	93.4	93.4	15.0	7.0
27	79.5	86.3	94.2	94.1	95.4	14.6	6.8
29	77.6	85.2	94.0	93.2	94.3	15.6	7.6
31	79.2	87.0	94.9	94.4	94.4	15.2	7.8
33	82.3	88.7	94.8	96.8	98.0	14.5	6.4
35	83.7	89.3	93.9	97.4	97.4	13.7	5.6
37	82.2	88.1	94.1	95.8	95.8	13.6	5.9
39	80.8	88.3	95.2	95.8	95.8	15.0	7.5
O.H. → 41	81.2	88.9	96.1	96.4	97.6	15.2	7.7
43	79.2	86.7	95.2	94.1	95.3	14.9	7.5
45	78.3	84.8	93.3	92.5	93.6	14.2	6.5
47	80.0	85.4	91.7	93.0	93.0	13.0	5.4
49	80.1	85.4	91.2	92.6	92.6	12.5	5.3
51	78.5	83.9	90.0	91.1	91.1	12.6	5.4
53	76.9	82.2	88.8	89.5	89.5	12.6	5.3
55	75.1	80.4	87.2	87.8	89.0	12.7	5.3
57	73.2	78.4	85.6	86.3	86.3	13.1	5.2
59	72.6	78.0	84.5	86.0	87.8	13.4	5.4
61	71.3	77.1	84.0	84.9	84.9	13.6	5.8

# TABLE H-VI

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 23, 100 KT. FLY BY, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	61.4	75.0	85.6	82.5	82.5	21.1	13.6
3	63.1	76.2	86.7	83.3	83.3	20.2	13.1
5	65.1	77.6	88.2	84.7	84.7	19.6	12.5
7	67.0	79.3	89.6	86.3	86.3	19.3	12.3
9	68.2	80.6	91.2	87.6	87.6	19.4	12.4
11	70.4	82.3	92.7	89.3	89.3	18.9	11.9
13	72.7	83.9	94.2	91.0	91.0	18.3	11.2
15	74.1	85.3	95.5	92.1	92.1	18.0	11.2
17	73.9	84.8	95.3	92.0	92.0	18.1	10.9
19	73.3	83.2	93.8	90.7	90.7	17.4	9.9
21	74.2	83.6	93.5	91.3	91.3	17.1	9.4
23	73.7	83.7	93.6	91.1	91.1	17.4	10.0
25	72.6	83.3	93.9	90.9	90.9	18.3	10.7
27	72.7	83.2	94.2	91.1	91.1	18.4	10.5
29	74.1	83.4	94.4	92.0	93.2	17.9	9.3
31	76.2	84.7	95.0	93.2	93.2	17.0	8.5
33	76.6	85.5	94.8	93.3	94.8	16.7	8.9
35	78.5	86.5	94.7	94.2	95.5	15.7	8.0
37	80.0	86.8	93.4	94.4	94.4	14.4	6.8
39	80.8	87.6	93.5	95.4	95.4	14.6	6.8
41	80.1	87.8	94.3	95.1	95.1	15.0	7.7
O.K. 43	79.9	87.7	94.9	95.2	95.2	15.3	7.8
45	80.4	87.6	95.5	95.2	96.3	14.8	7.2
47	80.1	86.3	94.2	93.9	95.3	13.8	6.2
49	80.4	86.0	92.5	93.8	94.9	13.4	5.6
51	80.4	85.3	90.9	93.2	93.2	12.8	4.9
53	79.6	84.3	89.3	92.0	92.0	12.4	4.7
55	77.7	82.7	89.1	90.3	91.6	12.6	5.0
57	75.6	80.9	88.0	89.0	90.1	13.4	5.3
59	73.0	78.9	85.8	86.9	86.9	13.9	5.9
61	70.3	76.6	83.7	84.3	85.7	14.0	6.3
63	68.9	75.6	82.4	83.4	83.4	14.5	6.7
65	67.7	75.0	81.7	83.1	83.1	15.4	7.3
67	66.4	74.2	80.9	82.6	82.6	16.2	7.8

# TABLE H-IV

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 24, 141 KT. FLY BY, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	74.8	83.9	92.2	91.6	91.6	16.8	9.1
2	77.3	85.9	93.8	93.5	93.5	16.2	8.6
3	78.1	86.7	94.6	94.6	94.6	16.5	8.6
4	78.6	87.0	95.1	95.1	95.1	16.5	8.4
5	79.0	86.8	95.2	95.8	95.8	16.8	7.8
6	79.3	87.1	95.5	96.4	96.4	17.1	7.8
7	79.6	87.7	96.2	96.8	96.8	17.2	8.1
8	79.7	88.5	96.8	97.0	97.0	17.3	8.8
9	80.9	89.7	97.7	97.8	97.8	16.9	8.8
10	82.5	91.3	98.6	99.2	99.2	16.7	8.8
11	84.1	92.7	99.7	100.9	100.9	16.8	8.6
12	85.1	93.6	100.5	101.9	101.9	16.8	8.5
13	86.6	94.6	101.3	102.8	102.8	16.2	8.0
14	87.3	95.4	101.9	103.4	103.4	16.1	8.1
15	87.5	95.5	102.3	104.0	104.0	16.5	8.0
16	88.1	95.8	102.5	104.0	104.0	15.9	7.7
17	88.3	96.0	102.8	104.2	104.2	15.9	7.7
18	89.3	97.1	103.8	104.5	104.5	15.2	7.8
19	89.6	97.6	104.5	105.0	105.0	15.4	8.0
20	89.4	97.6	104.7	105.0	105.0	15.6	8.2
21	88.4	96.6	104.2	104.4	104.4	16.0	8.2
22	88.2	96.1	103.8	103.8	105.4	15.6	7.9
23	88.1	95.6	103.8	103.7	105.4	15.6	7.5
24	87.8	95.6	104.0	103.5	104.9	15.7	7.8
25	88.7	96.4	104.3	103.8	105.0	15.1	7.7
26	88.9	96.4	104.1	103.8	105.1	14.9	7.5
27	89.7	96.2	103.5	103.5	103.5	13.8	6.5
28	88.4	94.6	102.5	102.2	103.7	13.8	6.2
29	87.4	93.3	101.5	100.6	102.5	13.2	5.9
30	84.9	91.7	100.5	99.0	100.3	14.1	6.8
31	84.3	91.4	99.8	98.6	98.6	14.3	7.1
32	84.8	92.4	99.2	99.7	99.7	14.9	7.6
O.N. → 33	85.1	92.7	98.7	100.2	100.2	15.1	7.6
34	85.2	92.6	98.2	100.0	100.0	14.8	7.4
35	84.5	91.4	97.3	99.1	99.1	14.6	6.9
36	83.8	90.3	95.7	98.0	98.0	14.2	6.5
37	83.4	89.3	93.8	97.1	97.1	13.7	5.9
38	82.8	88.4	92.4	96.1	96.1	13.3	5.6
39	82.5	87.7	91.3	95.1	95.1	12.6	5.2
40	81.7	86.4	89.7	93.8	93.8	12.1	4.7
41	81.0	85.9	88.6	93.2	93.2	12.2	4.9
42	79.6	84.6	87.9	92.3	92.3	12.7	5.0



# TABLE H-II

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 25, 141 KT. FLY BY, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	77.1	85.9	94.1	94.0	94.0	16.9	8.8
2	77.0	85.8	94.4	94.2	94.2	17.2	8.8
3	78.4	86.6	95.2	95.1	95.1	16.7	8.2
4	82.1	89.5	96.4	97.7	97.7	15.6	7.4
5	83.4	90.9	98.0	99.3	99.3	15.9	7.5
6	84.6	92.6	99.9	101.1	101.1	16.5	8.0
7	85.6	94.5	101.9	102.7	102.7	17.1	8.9
8	89.4	96.8	103.6	105.0	105.0	15.6	7.4
9	91.9	98.8	104.8	106.5	106.5	14.6	6.9
10	93.7	100.6	105.9	107.8	107.8	14.1	6.9
11	93.3	100.6	106.0	107.7	107.7	14.4	7.3
12	92.4	100.4	106.3	107.6	107.6	15.2	8.0
13	90.3	99.1	105.9	106.3	106.3	16.0	8.8
14	92.1	99.6	106.1	107.1	108.2	15.0	7.5
15	92.9	99.4	105.8	107.1	108.4	14.2	6.5
16	92.8	99.2	105.6	106.8	108.3	14.0	6.4
17	90.2	97.3	104.6	104.7	106.2	14.5	7.1
18	88.2	95.8	103.6	103.3	104.7	15.1	7.6
19	86.6	94.6	102.9	102.1	103.6	15.5	8.0
20	87.7	94.7	102.8	102.5	102.5	14.8	7.0
21	87.2	94.0	102.4	102.2	103.7	15.0	6.8
22	86.8	93.0	101.6	101.1	102.8	14.3	6.2
23	85.3	91.7	100.4	99.7	99.7	14.4	6.4
24	84.2	91.0	99.5	98.1	98.1	13.9	6.8
25	84.1	91.3	98.6	99.0	99.0	14.9	7.2
O.H. → 26	84.6	92.0	98.2	99.8	99.8	15.2	7.4
27	84.6	92.0	97.7	99.9	99.9	15.3	7.4
28	84.2	91.2	97.0	99.0	99.0	14.8	7.0
29	83.6	89.8	95.7	97.9	97.9	14.3	6.2
30	83.5	89.2	94.3	97.1	97.1	13.6	5.7
31	83.5	89.0	93.3	96.8	96.8	13.2	5.4
32	83.4	88.5	91.9	96.1	96.1	12.7	5.1

# TABLE H-V

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 26, 141 KT. FLY BY, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	73.3	83.5	90.5	93.0	93.0	19.7	10.2
2	74.1	84.6	92.7	93.8	93.8	19.7	10.5
3	74.6	85.4	94.5	95.2	95.2	20.6	10.8
4	77.5	87.1	96.2	96.7	96.7	19.2	9.6
5	81.4	89.5	97.9	99.0	99.0	17.6	8.1
6	84.1	92.3	99.9	101.4	101.4	17.3	8.2
7	86.0	94.6	101.9	103.2	103.2	17.2	8.6
8	87.0	95.7	103.0	104.1	104.1	17.1	8.7
9	87.3	96.3	103.6	104.6	104.6	17.3	9.0
10	87.2	96.3	103.7	104.6	104.6	17.4	9.1
11	87.8	96.5	103.7	105.0	105.0	17.2	8.7
12	89.3	96.6	103.8	106.1	106.1	16.8	7.3
13	89.9	96.9	103.9	106.2	106.2	16.3	7.0
14	91.1	97.8	104.2	106.4	106.4	15.3	6.7
15	91.2	98.2	104.5	106.1	107.3	14.9	7.0
16	91.0	98.2	104.7	106.3	106.3	15.3	7.2
17	89.7	97.7	104.8	105.6	105.6	15.9	8.0
18	88.9	97.0	104.6	105.2	106.9	16.3	8.1
19	88.9	96.5	104.3	104.3	106.1	15.9	7.6
20	88.3	95.5	103.9	104.0	105.4	15.7	7.2
21	88.0	95.3	104.0	103.8	105.5	15.8	7.3
22	88.2	95.1	104.1	104.0	105.5	15.8	6.9
23	88.2	95.1	104.1	104.1	105.4	15.9	6.9
24	88.6	95.3	103.7	104.0	104.0	15.4	6.7
25	88.7	95.2	103.3	103.9	105.2	15.2	6.5
26	88.2	94.4	102.3	102.7	104.4	14.5	6.2
27	86.3	92.5	100.8	100.7	101.8	14.4	6.2
28	84.2	90.9	99.4	98.7	98.7	14.5	6.7
29	84.0	91.4	98.7	98.9	98.9	14.9	7.4
30	84.3	91.9	98.2	99.5	99.5	15.2	7.6
O.H. → 31	84.6	92.3	97.9	100.0	100.0	15.4	7.7
32	84.2	91.8	97.5	99.7	99.7	15.5	7.6
33	83.5	90.8	96.8	99.0	99.0	15.5	7.3
34	82.9	89.3	95.3	97.9	97.9	15.0	6.4
35	82.8	88.8	93.6	97.3	97.3	14.5	6.0
36	82.4	88.2	92.1	96.6	96.6	14.2	5.8
37	82.2	87.9	91.5	96.0	96.0	13.8	5.7
38	81.4	87.2	90.6	95.3	95.3	13.9	5.8

# TABLE H-V

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 27: 141 KT. FLY BY, MIC: 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES

(DB RE 20 MICRO PA)

INT	DBA	DRD	OASPL	PNL	PNLT	PNL-DBA	DRD-DBA
1	76.1	84.6	87.5	93.3	93.3	17.2	8.5
2	76.3	85.0	89.3	93.8	93.8	17.5	8.7
3	77.1	86.2	91.4	94.9	94.9	17.8	9.1
4	79.2	88.7	94.2	96.7	96.7	17.5	9.5
5	84.8	93.7	98.3	100.7	100.7	15.9	8.9
6	86.7	95.4	100.3	102.5	102.5	15.8	8.7
7	86.9	95.4	100.6	102.7	102.7	15.8	8.5
8	85.3	93.6	99.9	101.7	101.7	16.4	8.3
9	84.4	92.5	99.6	101.2	101.2	16.8	8.1
10	84.9	92.5	99.9	101.8	101.8	16.9	7.6
11	86.0	93.0	100.4	102.8	102.8	16.8	7.0
12	86.9	94.0	101.0	103.6	103.6	16.7	7.1
13	86.7	93.9	101.1	103.7	103.7	17.0	7.2
14	86.2	93.3	100.6	103.1	103.1	16.9	7.1
15	85.5	92.1	99.6	102.3	102.3	16.8	6.6
16	84.9	91.5	99.3	101.7	102.8	16.8	6.6
17	86.6	93.4	101.2	103.1	103.1	16.5	6.8
18	88.0	95.9	103.3	104.8	104.8	16.8	7.9
19	90.6	98.1	104.8	106.4	106.4	15.8	7.5
20	91.5	98.8	105.7	107.1	107.1	15.6	7.3
21	92.3	99.4	106.1	107.7	107.7	15.4	7.1
22	92.5	99.4	106.5	107.4	107.4	14.9	6.9
23	93.0	99.5	106.4	107.4	108.5	14.4	6.5
24	93.5	99.2	106.2	107.3	108.3	13.8	5.7
25	93.5	98.9	105.6	107.1	108.5	13.6	5.4
26	94.2	99.5	105.1	107.0	107.0	12.8	5.3
27	93.4	98.7	104.2	105.8	105.8	12.4	5.3
28	91.8	97.1	103.0	104.7	104.7	12.9	5.3
29	87.3	93.0	101.4	101.9	101.9	14.6	5.7
30	84.9	92.0	100.0	99.7	99.7	14.8	7.1
31	85.4	92.8	99.2	100.7	100.7	15.3	7.4
32	86.0	93.5	98.8	101.4	101.4	15.4	7.5
O.H. → 33	85.5	93.1	98.3	101.1	101.1	15.6	7.6
34	84.3	91.7	97.1	99.9	99.9	15.6	7.4
35	83.6	90.6	95.5	98.8	98.8	15.2	7.0
36	83.5	90.1	94.0	98.3	98.3	14.8	6.6
37	82.9	89.3	92.6	97.3	97.3	14.4	6.4
38	81.9	87.9	90.9	96.1	96.1	14.2	6.0
39	80.6	86.4	89.1	94.6	94.6	14.0	5.8

# TABLE H-V

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 28, 150 KT. FLY BY, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	78.4	87.9	96.2	97.2	97.2	18.8	9.5
2	79.5	89.3	97.8	98.4	98.4	18.9	9.8
3	81.4	91.1	99.6	99.8	99.8	18.4	9.7
4	83.6	92.9	101.6	102.2	102.2	18.6	9.3
5	85.4	95.1	103.5	104.0	104.0	18.6	9.7
6	88.4	97.4	105.2	105.7	105.7	17.3	9.0
7	91.0	99.7	106.5	107.0	107.0	16.0	8.7
8	93.2	101.5	107.7	108.8	108.8	15.6	8.3
9	95.4	103.2	109.2	110.8	110.8	15.4	7.8
10	95.5	103.4	109.7	111.0	111.0	15.5	7.9
11	94.7	102.7	109.4	110.3	110.3	15.6	8.0
12	92.9	100.9	108.2	108.4	108.4	15.5	8.0
13	91.7	99.4	107.2	107.4	107.4	15.7	7.7
14	91.3	98.3	106.2	107.1	107.1	15.8	7.0
15	90.6	97.5	105.4	106.2	106.2	15.6	6.9
16	90.4	96.5	104.4	105.0	105.0	14.6	6.1
17	89.3	95.7	103.9	104.3	104.3	15.0	6.4
18	88.0	94.9	103.3	103.0	103.0	15.0	6.9
19	86.9	95.1	102.5	102.6	102.6	15.7	8.2
20	86.1	94.5	101.4	102.1	102.1	16.0	8.4
21	85.3	93.6	100.1	101.2	101.2	15.9	8.3
22	84.1	91.8	98.7	99.8	99.8	15.7	7.7
23	83.2	90.4	96.5	98.5	98.5	15.3	7.2
24	82.7	89.0	94.0	97.4	98.4	14.7	6.3

# TABLE H-V

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 29, 150 KT. FLY BY, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
3	77.8	86.8	94.3	96.2	96.2	18.4	9.0
4	82.1	91.0	98.2	99.3	99.3	17.2	8.9
5	86.1	94.5	101.7	103.3	103.3	17.2	8.4
6	88.5	96.9	103.7	105.2	105.2	16.7	8.4
7	89.5	97.7	104.5	106.0	106.0	16.5	8.2
8	90.2	98.4	104.9	106.2	106.2	16.0	8.2
9	91.6	99.1	105.3	107.1	107.1	15.5	7.5
10	94.1	101.7	107.3	108.5	108.5	14.4	7.6
11	95.9	102.9	109.0	110.2	110.2	14.3	7.0
12	96.1	103.2	109.7	110.9	110.9	14.8	7.1
13	94.9	102.0	109.2	110.4	110.4	15.5	7.1
14	95.0	101.9	108.4	109.7	109.7	14.7	6.9
15	94.3	100.9	107.4	108.8	110.1	14.5	6.6
16	93.7	99.9	106.5	107.7	108.7	14.0	6.2
17	90.7	97.0	104.8	105.5	105.5	14.8	6.3
18	89.2	95.1	103.2	103.7	103.7	14.5	5.9
19	88.2	94.0	102.1	102.7	102.7	14.5	6.4
20	86.4	93.0	101.1	101.5	101.5	15.1	7.5
D.N. → 21	86.0	93.7	100.5	101.2	101.2	15.2	7.7
22	85.4	93.1	99.7	100.7	100.7	15.3	7.7
23	84.6	92.1	98.7	99.8	99.8	15.2	7.5
24	84.1	91.1	97.2	99.1	99.1	15.0	7.0
25	83.5	90.1	95.0	98.4	98.4	14.9	6.6

# TABLE H-V

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 12, 6 DEGREE APPROACH, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	JASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	72.2	81.2	87.3	89.4	90.5	17.2	9.0
5	73.8	82.7	88.2	90.6	90.6	16.8	8.9
9	73.3	82.6	88.6	90.8	90.8	17.5	9.3
13	73.3	82.5	88.7	90.9	90.9	17.6	9.2
17	75.1	82.9	87.8	90.8	90.8	15.7	7.8
21	74.6	81.7	86.8	89.4	89.4	14.8	7.1
25	72.6	80.3	86.1	88.6	88.6	16.0	7.7
29	77.2	84.0	88.2	91.5	91.5	14.3	6.8
33	76.8	84.1	88.5	92.0	92.0	15.2	7.3
37	76.2	84.7	90.0	92.6	92.6	16.4	8.5
41	77.1	85.7	90.7	93.6	93.6	16.5	8.6
45	75.1	82.5	87.3	90.4	90.4	15.3	7.4
49	78.2	82.4	87.2	90.7	92.1	12.5	4.2
53	73.1	79.7	87.4	89.0	90.1	15.9	6.6
57	69.8	79.2	88.8	89.0	89.0	19.2	9.4
61	69.2	77.7	87.7	87.6	87.6	18.4	8.5
65	72.1	80.9	90.2	89.8	89.8	17.7	8.8
69	73.7	81.4	89.2	90.5	90.5	16.8	7.7
73	75.0	81.0	88.9	90.5	91.7	15.5	6.0
77	72.9	80.4	88.9	89.8	91.0	16.5	7.5
81	78.2	83.9	90.1	92.7	93.9	14.5	5.7
85	79.3	84.7	91.5	93.8	93.8	14.5	5.4
89	83.1	88.2	93.9	97.0	98.6	13.9	5.1
93	84.2	88.5	93.6	97.0	98.3	12.8	4.3
97	85.4	89.9	94.7	98.6	99.7	13.2	4.5
101	84.5	89.8	94.1	98.3	99.5	13.8	5.3
105	84.7	90.1	95.7	98.3	98.3	13.6	5.4
107	86.4	91.8	98.5	99.6	101.1	13.2	5.4
111	84.7	89.9	96.8	97.6	97.6	12.9	5.2
O.H. 115 → 118	84.3	89.9	96.2	97.9	97.9	13.6	5.6
119	83.0	88.4	95.4	96.2	96.2	13.2	5.4
123	83.3	88.9	96.1	97.2	98.4	13.9	5.6
127	82.1	87.3	91.9	95.4	97.2	13.3	5.2
131	81.1	86.5	89.7	95.1	97.0	14.0	5.4
135	75.9	81.6	87.2	90.1	91.7	14.2	5.7
139	71.9	78.1	85.3	86.3	86.3	14.4	6.2
143	70.5	77.3	83.5	86.0	87.2	15.5	6.8

# TABLE H-V

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 22, 100 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
3	66.4	76.7	86.6	84.5	84.5	18.1	10.3
5	70.4	79.9	88.6	87.7	87.7	17.3	9.5
7	72.1	81.9	90.1	89.1	90.2	17.0	9.8
9	74.9	82.9	91.2	90.7	92.8	15.8	8.0
11	75.2	83.1	92.0	91.3	93.1	16.1	7.9
13	74.8	84.6	93.4	92.1	92.1	17.3	9.8
15	79.2	87.5	95.0	94.7	94.7	15.5	8.3
17	83.0	90.5	96.8	97.7	97.7	14.7	7.5
19	82.6	90.5	97.3	97.6	97.6	15.0	7.9
21	81.0	89.3	96.8	97.1	98.2	16.1	8.3
23	78.5	86.8	95.3	95.2	95.2	16.7	8.3
25	78.3	86.0	94.6	94.6	94.6	16.3	7.7
27	80.7	86.6	94.8	95.9	97.4	15.2	5.9
29	81.4	87.8	95.6	96.8	98.0	15.4	6.4
31	80.2	87.4	95.8	95.5	96.9	15.3	7.2
33	78.8	87.1	96.1	95.2	96.6	16.4	8.3
35	83.1	88.6	96.2	96.9	96.9	13.8	5.5
37	86.0	90.3	96.1	98.6	100.4	12.6	4.3
39	82.0	87.6	94.4	95.5	97.3	13.5	5.6
41	78.2	84.9	94.5	93.1	94.2	14.9	6.7
43	82.6	87.6	94.6	96.3	98.0	13.7	5.0
45	84.3	89.7	95.0	98.4	98.4	14.1	5.4
47	83.0	88.8	94.2	97.2	98.7	14.2	5.8
49	78.8	85.7	93.8	93.8	93.8	15.0	6.9
O.H. 51 → 52	77.1	84.3	94.6	91.9	91.9	14.8	7.2
53	76.5	83.3	93.3	90.9	92.1	14.4	6.8
55	77.9	83.7	91.2	91.4	91.4	13.5	5.8
57	78.6	83.9	92.7	91.5	92.5	12.9	5.3
59	78.4	83.8	93.2	91.6	92.7	13.2	5.4
61	79.2	83.7	90.4	91.9	91.9	12.7	4.5
63	78.4	82.7	87.5	90.7	90.7	12.3	4.3
65	75.4	79.8	84.5	88.1	88.1	12.7	4.4
67	72.7	77.7	83.3	86.2	87.9	13.5	5.0
69	69.5	75.3	83.0	84.2	86.3	14.7	5.8

# TABLE H-V

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 23, 110 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	59.8	72.3	83.9	82.3	82.3	22.5	12.5
3	60.9	73.2	85.0	82.6	82.6	21.7	12.3
5	61.9	74.8	86.6	83.3	83.3	21.4	12.9
7	64.9	77.4	88.9	86.0	86.0	21.1	12.5
9	69.7	80.6	91.0	89.2	89.2	19.5	10.9
11	75.3	84.2	93.6	92.4	92.4	17.1	8.9
13	78.9	88.1	96.2	95.1	95.1	16.2	9.2
14	79.5	88.7	96.7	95.7	95.7	16.2	9.2
16	77.9	87.6	96.2	95.3	95.3	17.4	9.7
18	77.6	85.9	95.2	94.7	94.7	17.1	8.3
20	77.5	84.6	94.3	93.7	95.0	16.2	7.1
22	74.1	83.3	93.3	91.9	93.3	17.8	9.2
24	72.8	82.8	93.3	91.6	91.6	18.8	10.0
26	74.3	84.2	93.7	92.5	92.5	18.2	9.9
28	75.3	84.9	93.5	92.9	94.2	17.6	9.6
30	74.5	83.0	93.6	91.9	91.9	17.4	8.5
32	75.5	83.4	95.2	91.4	92.5	15.9	7.9
34	76.7	84.9	94.8	92.8	94.0	16.1	8.2
36	78.0	85.0	92.5	93.5	93.5	15.5	7.0
38	76.9	84.0	92.1	92.3	93.4	15.4	7.1
O.H. 40 → 41	77.6	84.8	94.7	92.8	92.8	15.2	7.2
42	77.1	84.0	94.4	91.1	91.1	14.0	6.9
44	76.8	83.3	91.6	91.3	91.3	14.5	6.5
46	78.8	84.0	91.9	91.5	92.6	12.7	5.2
48	79.6	84.8	93.6	92.1	93.5	12.5	5.2
50	78.3	83.4	90.6	90.8	90.8	12.5	5.1
52	78.5	83.2	87.5	90.7	92.0	12.2	4.7
54	76.7	81.4	85.5	89.5	89.5	12.8	4.7
56	74.2	79.3	84.4	87.7	90.1	13.5	5.1
58	72.2	77.2	83.3	85.6	87.1	13.4	5.0
60	70.1	75.2	81.9	83.5	83.5	13.4	5.1
62	67.0	73.1	80.5	82.5	82.5	15.5	6.1
64	66.0	72.2	79.4	82.1	82.1	16.1	6.2
66	66.0	72.3	78.5	82.1	82.1	16.1	6.3



# TABLE H-V

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 24. 141 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLI	PNL-DBA	DBD-DBA
1	73.5	82.5	90.2	91.2	91.2	17.7	9.0
2	74.5	83.7	91.2	92.0	92.0	17.5	9.2
3	76.1	85.3	92.3	93.2	93.2	17.1	9.2
4	80.0	87.0	93.4	95.0	95.0	15.0	7.0
5	81.7	88.6	94.7	96.3	96.3	14.6	6.9
6	82.2	89.4	95.7	96.9	96.9	14.7	7.2
7	82.2	90.0	96.4	97.4	97.4	15.2	7.8
8	83.7	91.1	97.4	99.3	100.3	15.6	7.4
9	85.4	92.5	98.6	100.9	101.9	15.5	7.1
10	86.9	93.9	99.6	101.8	102.9	14.9	7.0
11	87.4	94.6	100.4	101.8	101.8	14.4	7.2
12	87.5	95.1	101.3	101.7	101.7	14.2	7.6
13	87.4	95.6	102.2	101.8	101.8	14.4	8.2
14	88.3	96.4	103.0	102.6	102.6	14.3	8.1
15	88.5	96.6	103.2	102.9	102.9	14.4	8.1
16	88.9	96.7	103.0	103.2	103.2	14.3	7.8
17	88.5	96.3	102.7	103.0	103.0	14.5	7.8
18	89.4	96.9	103.0	103.3	103.3	13.9	7.5
19	89.9	97.5	103.5	103.8	103.8	13.9	7.6
20	89.8	97.5	103.8	104.3	104.3	14.5	7.7
21	88.7	96.9	103.7	104.1	104.1	15.4	8.2
22	88.2	96.7	103.9	103.7	103.7	15.5	8.5
23	87.7	96.7	103.9	103.2	103.2	15.5	9.0
24	87.1	96.3	103.7	103.1	103.1	16.0	9.2
25	85.4	95.4	103.5	102.3	102.3	16.9	10.0
26	84.7	94.8	103.4	101.9	101.9	17.2	10.1
27	84.6	94.7	103.3	101.9	101.9	17.3	10.1
28	84.3	93.8	102.5	101.3	101.3	17.0	9.5
29	83.2	92.4	101.4	100.3	101.4	17.1	9.2
30	82.0	90.9	100.9	98.7	98.7	16.7	8.9
31	80.8	90.3	101.3	98.0	98.0	17.2	9.5
32	81.4	90.4	101.4	98.2	98.2	16.7	9.0
33	81.3	89.5	100.6	97.2	97.2	15.9	8.2
34	81.8	88.7	99.2	96.2	97.4	14.4	6.9
35	81.5	88.3	98.3	96.0	97.3	14.5	6.8
O.M. → 36	81.6	88.4	98.5	96.2	96.2	14.6	6.8
37	81.0	88.0	98.5	95.9	95.9	14.9	7.0
38	81.0	87.7	97.5	95.5	95.5	14.5	6.7
39	81.3	87.4	95.3	95.2	95.2	13.9	6.1
40	81.5	87.0	93.3	94.8	94.8	13.3	5.5
41	81.0	86.0	93.4	94.1	94.1	13.1	5.0
42	80.8	85.5	93.7	93.3	94.5	12.5	4.7
43	80.5	85.3	93.3	92.8	93.8	12.3	4.8
44	80.3	85.1	92.0	92.3	92.3	12.0	4.8
45	79.6	84.2	90.6	91.7	91.7	12.1	4.6

# TABLE H-V

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 25, 141 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	76.3	83.1	88.4	91.3	91.3	15.0	6.8
2	77.0	84.3	90.2	92.2	92.2	15.2	7.3
3	79.1	86.7	92.7	94.3	94.3	15.2	7.6
4	80.6	88.5	95.0	96.3	96.3	15.7	7.9
5	81.3	89.8	96.9	97.3	97.3	16.0	8.5
6	81.2	90.3	98.3	97.8	97.8	16.6	9.1
7	82.2	91.2	99.8	99.8	99.8	17.6	9.0
8	87.1	93.4	100.9	101.7	101.7	14.6	6.3
9	89.7	95.3	102.2	103.2	103.2	13.5	5.6
10	91.2	97.7	103.6	104.8	104.8	13.6	6.5
11	91.4	98.8	104.8	105.5	105.5	14.1	7.4
12	91.1	99.4	105.4	105.5	105.5	14.4	8.3
13	91.0	99.3	105.4	105.4	105.4	14.4	8.3
14	90.6	98.7	104.9	105.4	105.4	14.8	8.1
15	90.1	98.0	104.6	105.1	105.1	15.0	7.9
16	88.7	97.3	104.4	104.5	105.5	15.8	8.6
17	88.0	97.2	104.6	104.1	105.8	16.1	9.2
18	87.2	96.7	104.5	103.6	103.6	16.4	9.5
19	87.1	96.5	104.5	103.3	103.3	16.2	9.4
20	86.6	95.9	104.2	103.3	103.3	16.7	9.3
21	86.2	95.6	103.8	102.8	102.8	16.6	9.4
22	84.9	94.6	103.0	101.9	101.9	17.0	9.7
23	83.5	93.1	101.8	100.7	100.7	17.2	9.6
24	82.9	91.6	101.3	99.5	99.5	16.6	8.7
25	82.6	90.7	101.4	98.9	99.9	16.3	8.1
26	82.8	90.7	101.7	99.2	100.2	16.4	7.9
27	82.1	90.0	101.1	98.3	99.4	16.2	7.9
28	81.6	88.9	99.9	96.9	96.9	15.3	7.3
29	80.9	87.9	98.8	95.5	95.5	14.6	7.0
O.H. → 30	80.8	87.7	98.8	94.9	94.9	14.1	6.9
31	81.3	87.9	98.9	95.1	95.1	13.8	6.6
32	81.5	87.7	97.9	95.0	95.0	13.5	6.2

# TABLE H-7

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 26, 141 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	76.5	85.4	92.5	95.7	95.7	19.2	8.9
2	77.1	86.2	93.6	96.1	96.1	19.0	9.1
3	78.4	87.7	95.3	97.3	97.3	18.9	9.3
4	80.6	89.9	97.2	98.7	98.7	18.1	9.3
5	86.2	94.2	100.5	102.3	102.3	16.1	8.0
6	89.2	96.8	103.1	105.2	105.2	16.0	7.6
7	91.7	98.8	105.1	107.0	107.0	15.3	7.1
8	93.1	99.9	106.2	108.1	108.1	15.0	6.8
9	92.9	100.0	106.4	107.9	107.9	15.0	7.1
10	92.4	99.9	106.4	108.0	108.0	15.6	7.5
11	91.5	99.9	106.6	107.8	107.8	16.3	8.4
12	91.1	99.7	106.7	107.6	107.6	16.5	8.6
13	90.1	98.6	106.1	107.1	107.1	17.0	8.5
14	89.5	97.0	105.0	106.2	106.2	16.7	7.5
15	89.0	96.2	104.2	105.6	105.6	16.6	7.2
16	88.4	96.2	103.9	105.3	105.3	16.9	7.8
17	87.9	96.2	104.2	105.3	106.4	17.4	8.3
18	87.4	95.6	103.9	104.7	104.7	17.3	8.2
19	86.8	95.0	103.8	103.8	103.8	17.0	8.2
20	85.8	94.5	103.4	103.6	103.6	17.8	8.7
21	85.8	94.7	103.3	103.5	103.5	17.7	8.9
22	84.7	93.7	102.5	102.8	102.8	18.1	9.0
23	83.6	92.5	102.0	101.3	101.3	17.7	8.9
24	82.6	91.4	101.9	100.5	101.5	17.9	8.8
25	83.3	91.5	101.9	100.5	100.5	17.2	8.2
26	83.2	90.9	101.7	99.7	99.7	16.5	7.7
27	82.8	89.7	100.7	98.4	98.4	15.6	6.9
28	81.9	88.8	99.9	97.1	97.1	15.2	6.9
O.H. → 29	81.6	88.5	99.7	96.6	96.6	15.0	6.9
30	81.7	88.5	99.4	96.7	96.7	15.0	6.8

# TABLE H-V

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 27, 141 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	79.6	86.7	91.6	96.0	96.0	16.4	7.1
2	81.7	89.5	93.7	97.9	99.0	16.2	7.2
3	84.3	91.9	95.8	99.5	99.5	15.2	7.6
4	85.4	93.1	97.9	101.1	101.1	15.7	7.7
5	86.5	94.2	99.9	102.0	102.0	15.5	7.7
6	87.0	95.3	102.2	103.7	103.7	16.7	8.3
7	88.6	97.2	104.1	105.6	105.6	17.0	8.6
8	92.9	100.1	106.0	107.7	107.7	14.8	7.2
9	95.4	101.7	107.4	110.2	110.2	14.8	6.3
10	95.6	102.0	107.9	110.6	110.6	15.0	6.4
11	94.3	101.2	107.6	110.0	110.0	15.7	6.9
12	92.7	100.4	107.0	108.8	108.8	16.1	7.7
13	92.5	100.0	106.7	108.4	108.4	15.9	7.5
14	92.1	99.5	106.4	108.2	108.2	16.1	7.4
15	92.2	99.8	106.6	108.6	108.6	16.4	7.6
16	92.8	99.9	106.6	108.8	108.8	16.0	7.1
17	92.3	99.5	106.5	108.1	108.1	15.8	7.2
18	90.8	98.1	105.8	106.9	106.9	16.1	7.3
19	88.0	96.2	104.5	105.4	105.4	17.4	8.2
20	87.2	94.8	103.3	104.2	104.2	17.0	7.6
21	86.3	94.1	103.5	102.7	102.7	16.4	7.8
22	86.0	93.9	103.7	102.8	102.8	16.8	7.9
23	85.7	93.5	103.5	102.2	102.2	16.5	7.8
24	85.0	91.7	102.1	100.5	100.5	15.5	6.7
25	84.2	90.3	100.8	98.9	98.9	14.7	6.1
26	83.1	89.5	100.0	97.6	97.6	14.5	6.4
O.H. → 27	82.5	89.5	100.3	97.7	97.7	15.2	7.0

# TABLE H-II

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1975

EVENT 28, 150 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLI	PNL-DBA	DBD-DBA
1	80.0	89.4	96.5	98.2	98.2	18.2	9.4
2	83.8	92.6	99.0	100.6	100.6	16.8	8.8
3	86.7	94.8	101.9	103.0	103.0	16.3	8.1
4	88.1	96.2	103.9	105.0	105.0	16.9	8.1
5	89.7	98.0	105.4	106.6	106.6	16.9	8.3
6	92.8	100.4	107.0	109.1	109.1	16.3	7.6
7	97.8	104.1	108.9	111.8	112.4	14.0	6.3
8	99.0	105.4	109.9	112.9	113.5	13.9	6.4
9	99.5	105.8	110.3	113.3	114.5	13.8	6.3
10	97.6	104.6	109.9	112.6	112.6	15.0	7.0
11	96.3	103.5	109.1	111.6	111.6	15.3	7.2
12	94.5	102.1	108.3	110.3	110.3	15.8	7.6
13	93.8	101.1	107.7	109.4	109.4	15.6	7.3
14	92.8	100.0	107.2	108.8	108.8	16.0	7.2
15	91.1	98.7	106.1	107.4	108.7	16.3	7.6
16	89.8	96.9	105.0	105.7	105.7	15.9	7.1
17	88.8	96.2	105.1	104.4	104.4	15.6	7.4
18	88.1	95.7	105.1	104.1	104.1	16.0	7.6
19	87.3	95.1	104.8	103.5	103.5	16.2	7.8
20	86.1	93.1	103.2	101.8	101.8	15.7	7.0
O.M. → 22							

# TABLE H-V

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 24, 141 KT. FLY BY, CENTERLINE MIC. ( HARD SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	73.1	82.9	87.9	93.0	93.0	19.9	9.8
3	74.3	84.1	90.0	93.5	93.5	19.2	9.8
5	75.6	85.0	92.1	94.3	94.3	18.7	9.4
7	78.2	87.6	94.6	96.2	96.2	18.0	9.4
9	82.7	91.1	98.0	99.7	99.7	17.0	8.4
11	88.5	96.6	102.0	103.8	103.8	15.3	8.1
13	90.7	98.7	104.3	105.8	105.8	15.1	8.0
14	90.6	98.8	104.7	106.0	106.0	15.4	8.2
16	90.2	98.4	104.5	105.7	105.7	15.5	8.2
18	88.6	97.0	103.7	105.0	105.0	16.4	8.4
20	86.7	94.6	102.3	103.3	103.3	16.6	7.9
22	85.8	93.2	101.3	102.3	102.3	16.5	7.4
24	85.6	92.9	101.6	102.1	102.1	16.5	7.3
26	87.6	96.4	103.9	103.8	103.8	16.2	8.8
28	88.5	98.2	105.5	105.0	105.0	16.5	9.7
30	88.8	98.7	106.3	105.5	105.5	16.7	9.9
32	87.5	97.3	105.6	104.7	104.7	17.2	9.8
34	84.9	94.8	104.2	103.2	104.4	18.3	9.9
36	84.5	94.2	103.7	102.1	102.1	17.6	9.7
38	87.9	96.0	103.2	103.4	103.4	15.5	8.1
D.H.→40	89.0	96.7	102.6	104.0	104.0	15.0	7.7
42	88.2	96.2	102.5	103.9	103.9	15.7	8.0
44	86.8	93.8	99.8	102.2	102.2	15.4	7.0
46	85.0	91.0	96.7	98.9	98.9	13.9	6.0
48	80.7	86.9	92.5	95.2	95.2	14.5	6.2
50	78.4	84.6	89.7	93.6	93.6	15.2	6.2
52	75.4	82.8	87.2	92.5	92.5	17.1	7.4
54	74.4	81.9	84.8	91.9	91.9	17.5	7.5

# TABLE H-II

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 29, 150 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
2	80.8	89.9	95.7	98.1	98.1	17.3	9.1
3	82.4	91.5	97.7	99.8	99.8	17.4	9.1
4	83.7	92.6	99.5	101.1	101.1	17.4	8.9
5	86.8	95.0	102.5	104.2	104.2	17.4	8.2
6	95.0	102.0	106.0	109.7	109.7	14.7	7.0
7	98.2	104.6	108.2	111.7	111.7	13.5	6.4
8	98.7	105.4	109.3	112.6	112.6	13.9	6.7
9	98.5	105.1	109.9	112.5	112.5	14.0	6.6
10	97.5	104.6	109.9	112.5	112.5	15.0	7.1
11	96.9	104.1	109.5	112.0	112.0	15.1	7.2
12	95.6	103.2	109.2	111.2	111.2	15.6	7.6
13	95.1	102.4	108.9	110.6	110.6	15.5	7.3
14	94.9	101.8	108.5	110.3	110.3	15.4	6.9
15	94.9	101.4	108.1	109.8	109.8	14.9	6.5
16	93.6	100.1	107.1	109.0	109.0	15.4	6.5
17	91.8	98.6	106.2	107.6	107.6	15.8	6.8
18	87.6	95.8	104.7	104.6	104.6	17.0	8.2
19	86.5	94.2	104.0	102.9	102.9	16.4	7.7
20	86.7	93.5	103.5	102.0	102.0	15.3	6.8
21	86.6	93.0	103.0	101.6	101.6	15.0	6.4
22	85.2	91.9	102.6	99.9	99.9	14.7	6.7
O.H. → 23							

TABLE H-V

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 25, 141 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	76.5	85.5	91.1	94.5	94.5	18.0	9.0
2	78.1	87.1	93.1	95.9	95.9	17.8	9.0
3	79.6	89.4	95.4	97.5	97.5	17.9	9.8
4	80.7	91.1	97.4	98.8	98.8	18.1	10.4
5	82.4	92.9	99.3	100.3	100.3	17.9	10.5
6	84.7	95.2	101.4	102.4	102.4	17.7	10.5
7	87.3	97.4	103.4	104.6	104.6	17.3	10.1
8	89.4	99.2	105.2	106.3	106.3	16.9	9.8
9	91.3	100.7	106.5	107.6	107.6	16.3	9.4
10	93.4	102.2	107.6	108.7	108.7	15.3	8.8
11	94.4	103.1	108.3	109.2	109.2	14.8	8.7
12	94.3	102.8	108.1	109.0	109.0	14.7	8.5
13	93.1	101.8	107.2	108.3	108.3	15.2	8.7
14	91.5	100.1	105.9	107.3	107.3	15.8	8.6
15	90.6	99.1	105.2	106.4	106.4	15.8	8.5
16	89.7	98.2	104.7	105.6	105.6	15.9	8.5
17	89.1	97.7	104.5	105.2	105.2	16.1	8.6
18	88.3	97.0	104.2	104.6	104.6	16.3	8.7
19	87.7	96.4	103.8	104.2	104.2	16.5	8.7
20	87.2	95.7	103.5	103.7	103.7	16.5	8.5
21	87.0	95.3	103.7	103.5	103.5	16.5	8.3
22	87.2	95.3	104.2	103.9	103.9	16.7	8.6
23	87.7	96.8	105.0	104.5	104.5	16.8	9.1
24	87.9	97.6	105.7	105.0	105.0	17.1	9.7
25	87.4	97.6	105.9	104.9	104.9	17.5	10.2
26	86.4	97.2	105.9	104.5	104.5	18.1	10.8
27	85.3	96.3	105.5	104.1	104.1	18.8	11.0
28	84.4	95.4	105.1	103.6	103.6	19.2	11.0
29	84.0	94.5	104.3	102.9	102.9	18.9	10.5
30	85.4	94.7	103.9	102.3	102.3	16.9	9.3
31	86.5	95.1	103.5	102.3	102.3	15.8	8.6
OH. → 32	87.7	95.9	102.9	103.1	103.1	15.4	8.2
33	87.8	95.7	102.1	103.3	103.3	15.5	7.9
34	87.7	95.4	101.9	103.1	103.1	15.4	7.7
35	87.0	94.8	101.5	103.1	103.1	16.1	7.8
36	87.0	94.7	101.0	102.9	102.9	15.9	7.7
37	87.1	94.4	100.2	102.7	102.7	15.6	7.3
38	86.8	93.5	99.4	101.8	101.8	15.0	6.7
39	85.6	91.9	98.1	99.9	99.9	14.3	6.3
40	83.7	89.3	95.8	97.9	97.9	14.2	6.1
41	81.9	88.2	94.0	96.5	96.5	14.6	6.3
42	80.2	86.8	92.5	95.3	95.3	15.1	6.6



# TABLE H-V

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 26, 141 KT. FLY BY, CENTERLINE MIC. ( HARD SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	76.1	85.2	91.4	94.2	94.2	18.1	9.1
2	77.0	85.7	92.3	94.6	94.6	17.6	8.7
3	78.2	86.7	93.8	95.7	95.7	17.5	8.5
4	79.7	88.2	95.9	97.2	97.2	17.5	8.5
5	82.5	91.8	98.9	99.9	99.9	17.4	9.3
6	86.6	95.7	102.0	103.3	103.3	16.7	9.1
7	90.6	99.2	104.5	105.9	105.9	15.3	8.6
8	92.6	100.8	105.7	107.5	107.5	14.9	8.2
9	92.5	100.5	105.5	107.3	107.3	14.8	8.0
10	90.7	98.5	104.1	105.7	105.7	15.0	7.8
11	87.6	95.5	102.3	103.7	103.7	16.1	7.9
12	86.6	94.5	101.8	102.9	102.9	16.3	7.9
13	86.4	94.5	101.8	102.7	102.7	16.3	8.1
14	85.8	94.1	101.7	102.6	102.6	16.8	8.3
15	85.7	94.1	101.9	102.7	102.7	17.0	8.4
16	87.3	95.5	102.9	103.7	103.7	16.4	8.2
17	88.6	96.7	103.7	104.7	104.7	16.1	8.1
18	89.5	97.8	104.5	105.6	105.6	16.1	8.3
19	90.0	98.7	105.5	106.6	106.6	16.6	8.7
20	90.3	99.2	106.3	107.0	108.1	16.7	8.9
21	89.6	98.6	106.1	106.4	106.4	16.8	9.0
22	88.2	97.0	105.1	105.0	105.0	16.8	8.8
23	86.9	95.8	104.5	104.0	104.0	17.1	8.9
24	87.5	96.2	104.7	104.1	104.1	16.6	8.7
25	87.5	96.4	104.8	104.3	104.3	16.8	8.9
26	86.9	96.0	104.4	103.9	103.9	17.0	9.1
27	85.1	95.3	103.8	103.1	103.1	17.0	9.2
28	87.5	95.9	103.5	103.3	103.3	15.8	8.4
29	88.3	96.0	103.5	103.4	103.4	15.1	7.7
30	88.9	96.6	103.3	104.0	104.0	15.1	7.7
31	88.7	96.6	102.9	103.8	103.8	15.1	7.9
O.N. → 32	88.2	96.1	102.4	103.6	103.6	15.4	7.9
33	87.2	95.2	101.7	103.2	103.2	16.0	8.0
34	86.4	93.9	100.8	102.4	102.4	16.0	7.5
35	86.3	93.3	99.7	101.9	101.9	15.6	7.0
36	86.1	92.3	98.5	100.7	100.7	14.6	6.2
37	85.3	91.2	97.2	99.1	99.1	13.8	5.9
38	84.1	89.6	95.6	97.7	97.7	13.6	5.5
39	82.0	87.9	94.1	96.3	96.3	14.3	5.9
40	80.0	86.2	92.2	94.8	94.8	14.8	6.2
41	77.9	84.7	90.6	93.7	93.7	15.8	6.8

# TABLE H-V

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 27, 141 KT. FLY BY, CENTERLINE MIC. ( HARD SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLI	PNL-DBA	DBD-DBA
1	78.1	86.3	94.4	95.6	95.6	17.5	8.2
2	78.0	87.0	96.1	96.7	96.7	18.7	9.0
3	79.1	88.9	97.8	98.2	98.2	19.1	9.8
4	82.2	92.1	100.4	100.5	100.5	18.3	9.9
5	89.2	97.6	103.9	104.9	104.9	15.7	8.4
6	93.1	101.2	106.3	107.7	107.7	14.6	8.1
7	94.7	102.7	107.7	109.1	109.1	14.4	8.0
8	95.2	103.1	108.0	109.7	109.7	14.5	7.9
9	94.9	102.4	107.7	109.6	109.6	14.7	7.5
10	94.2	101.8	107.5	109.2	109.2	15.0	7.6
11	94.3	102.0	108.0	110.0	110.0	15.7	7.7
12	94.2	102.6	108.7	110.2	110.2	16.0	8.4
13	94.5	103.0	109.2	110.6	110.6	16.1	8.5
14	94.7	103.1	109.4	110.2	110.2	15.5	8.4
15	94.4	102.6	109.0	110.1	110.1	15.7	8.2
16	93.1	101.5	108.4	109.0	109.0	15.9	8.4
17	90.8	99.8	107.3	107.6	107.6	16.8	9.0
18	89.7	98.6	106.7	106.3	106.3	16.6	8.9
19	89.3	97.9	106.1	105.5	105.5	16.2	8.6
20	89.0	97.5	105.6	105.0	105.0	16.0	8.5
21	89.1	97.2	105.2	104.4	104.4	15.3	8.1
22	88.8	96.7	104.8	104.2	104.2	15.4	7.9
23	88.4	96.3	104.3	103.7	103.7	15.3	7.9
24	88.2	96.3	103.4	103.8	103.8	15.6	8.1
25	89.5	97.4	103.5	104.7	104.7	15.2	7.9
O.H. → 26	89.9	97.6	103.3	105.0	105.0	15.1	7.7
27	89.5	97.2	103.2	104.9	104.9	15.4	7.7
28	88.5	96.1	102.2	104.2	104.2	15.7	7.6
29	88.3	95.5	101.5	103.7	103.7	15.4	7.2
30	87.3	94.0	100.2	102.3	102.3	15.0	6.7
31	85.6	91.8	98.2	100.1	100.1	14.5	6.2
32	82.7	88.7	95.2	97.0	97.0	14.3	6.0
33	81.1	87.2	93.0	95.6	95.6	14.5	6.1
34	79.3	85.7	90.9	94.2	94.2	14.9	6.4

# TABLE H-V

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 12, 6 DEGREE APPROACH, CENTERLINE MIC. ( SOFT SIDE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	78.6	86.1	92.9	95.7	95.7	17.1	7.5
3	78.5	86.4	93.2	95.8	95.8	17.3	7.9
5	79.9	87.1	94.1	96.7	96.7	16.8	7.2
7	82.8	88.9	95.3	98.5	98.5	15.7	6.1
9	84.2	89.8	96.5	99.7	99.7	15.5	5.6
11	83.9	89.3	95.7	99.1	100.6	15.2	5.4
13	84.3	90.4	96.2	99.6	101.6	15.3	6.1
15	85.2	91.3	96.5	100.2	100.2	15.0	6.1
17	87.4	93.4	98.2	102.2	103.5	14.8	6.0
19	88.9	94.4	98.7	103.1	104.7	14.2	5.5
21	87.9	93.2	98.2	101.7	102.8	13.8	5.3
23	88.9	94.7	99.3	102.8	102.8	13.9	5.8
25	91.4	97.0	101.5	104.5	104.5	13.1	5.6
27	92.1	98.0	102.4	105.5	105.5	13.4	5.9
29	92.0	98.1	102.3	105.6	105.6	13.6	6.1
31	92.4	98.2	102.5	105.6	105.6	13.2	5.8
33	94.3	100.8	104.1	107.4	107.4	13.1	6.5
O.H. → 35	95.8	102.3	105.5	108.6	108.6	12.8	6.5
37	95.2	102.0	105.6	108.1	108.1	12.9	6.8
39	92.7	99.6	104.0	106.2	106.2	13.5	6.9
41	90.9	97.5	102.2	104.7	104.7	13.8	6.6
43	89.1	95.1	99.6	102.6	103.9	13.5	6.0
45	85.7	92.0	96.9	100.4	100.4	14.7	6.3
47	84.1	90.2	95.8	99.0	99.0	14.9	6.1
49	83.2	88.9	94.4	98.0	98.0	14.8	5.7
51	80.8	86.9	92.5	95.8	97.0	15.0	6.1
53	78.2	84.6	90.7	94.0	95.1	15.8	6.4
55	75.5	82.4	88.3	.0	.0	-75.4	6.9

# TABLE H-V

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 17, 60 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	72.9	81.4	87.6	92.7	92.7	19.8	8.5
3	72.4	81.3	87.8	92.7	92.7	20.3	8.9
5	73.2	82.0	88.4	93.1	93.1	19.9	8.8
7	76.9	84.4	90.5	94.6	94.6	17.7	7.5
9	81.8	87.4	93.2	97.3	98.4	15.5	5.6
11	85.2	90.5	95.3	99.9	99.9	14.7	5.3
13	86.9	91.9	95.6	101.1	101.1	14.2	5.0
15	87.2	91.6	95.4	100.8	100.8	13.6	4.4
17	85.5	89.5	94.4	99.1	99.1	13.6	4.0
19	81.1	87.1	91.9	96.3	96.3	15.2	6.0
21	79.2	85.0	90.2	94.8	94.8	15.6	5.8
23	74.2	81.9	89.0	93.2	93.2	19.0	7.7
25	72.9	81.6	88.6	92.8	92.8	19.9	8.7
27	78.9	85.1	91.0	94.5	94.5	15.6	6.2
29	80.5	86.0	91.9	95.8	96.8	15.3	5.5
31	80.4	85.1	91.0	94.9	96.2	14.5	4.7
33	74.7	82.3	89.3	93.4	93.4	18.7	7.6
35	74.3	82.1	89.9	93.1	93.1	18.8	7.8
37	76.0	83.8	91.2	93.7	93.7	17.7	7.8
39	79.6	85.7	92.1	95.6	95.6	16.0	6.1
41	81.9	87.1	92.3	97.2	98.8	15.3	5.2
43	85.2	89.6	94.2	99.3	100.4	14.1	4.4
45	85.8	90.2	94.6	99.5	101.1	13.7	4.4
47	84.9	90.0	94.3	99.0	101.1	14.1	5.1
49	83.9	89.7	94.4	99.0	99.0	15.1	5.8
51	84.5	90.8	95.5	100.1	101.6	15.6	6.3
53	86.2	92.4	97.0	101.2	101.2	15.0	6.2
55	88.2	93.7	98.3	101.8	103.6	13.6	5.5
57	88.7	94.8	100.1	102.8	102.8	14.1	6.1
59	89.4	95.7	100.8	104.1	104.1	14.7	6.3
61	90.0	96.0	100.2	104.0	104.0	14.0	6.0
63	89.3	94.9	98.7	102.6	102.6	13.3	5.6
65	86.3	92.7	97.4	100.4	100.4	14.1	6.4
67	84.9	91.8	96.8	100.0	100.0	15.1	6.9
O.H. 67 → 68	85.4	92.6	97.4	100.6	100.6	15.2	7.2
69	85.9	92.7	97.7	100.6	100.6	14.7	6.8
71	86.7	93.3	98.7	100.7	100.7	14.0	6.6
73	87.3	93.5	99.6	100.6	100.6	13.3	6.2
75	84.5	90.2	97.8	98.0	99.0	13.5	5.7
77	81.4	87.0	93.7	95.6	97.1	14.2	5.6
79	79.1	84.7	89.7	94.2	96.0	15.1	5.6
81	77.1	83.1	88.0	92.9	94.3	15.8	6.0
83	75.4	81.9	87.2	92.5	92.5	17.1	6.5
85	74.9	81.5	86.9	92.3	92.3	17.4	6.6
87	73.7	80.8	86.6	91.9	91.9	18.2	7.1

# TABLE H-V

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 20, 9 DEGREE APPROACH, CENTERLINE MIC. ( SOFT SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	78.3	84.6	91.2	94.7	94.7	16.4	6.3
3	78.2	85.0	91.9	95.1	95.1	16.9	6.8
5	80.0	85.3	92.7	95.9	95.9	15.9	5.8
7	81.6	87.0	93.6	97.1	98.1	15.5	5.4
9	82.7	88.2	94.5	98.2	99.9	15.5	5.5
11	83.5	88.6	94.6	98.4	100.0	14.9	5.1
13	85.1	89.9	95.0	99.1	99.1	14.0	4.8
15	85.2	90.2	95.6	99.0	99.0	13.8	5.0
17	86.6	91.9	97.0	100.3	101.8	13.7	5.3
19	86.6	92.2	97.3	100.4	101.5	13.8	5.6
21	86.3	91.9	97.5	100.7	100.7	14.4	5.6
23	87.1	93.0	98.7	101.6	102.7	14.5	5.9
25	88.4	94.5	99.4	102.5	103.5	14.1	6.1
27	88.9	95.4	100.1	102.9	102.9	14.0	6.5
29	89.8	96.3	101.0	103.3	104.4	13.5	6.5
31	91.2	97.6	101.7	104.7	104.7	13.5	6.4
33	93.0	99.4	102.9	106.3	106.3	13.3	6.4
35	93.8	100.3	103.7	107.3	107.3	13.5	6.5
o.H. → 37	94.6	101.5	104.7	108.0	108.0	13.4	6.9
38	95.1	101.8	105.1	108.2	108.2	13.1	6.7
40	93.9	100.7	104.8	107.2	107.2	13.3	6.8
42	91.3	98.4	103.2	105.2	106.2	13.9	7.1
44	90.4	96.5	101.8	104.0	105.6	13.6	6.1
46	88.7	94.7	100.1	102.6	103.8	13.9	6.0
48	85.1	91.1	96.8	99.4	99.4	14.3	6.0
50	83.5	89.1	94.1	98.0	98.0	14.5	5.6
52	82.0	87.5	93.0	96.9	97.9	14.9	5.5
54	80.1	85.9	91.5	95.7	97.2	15.6	5.8
56	76.7	83.5	89.6	93.6	94.8	16.9	6.8
58	74.6	82.2	87.7	.0	.0	-74.5	7.6

# TABLE H-II

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 18, 60 KI. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	70.9	79.1	81.7	.0	.0	-70.8	8.2
4	74.2	80.6	84.2	92.2	92.2	18.0	6.4
7	74.3	81.0	84.9	92.3	92.3	18.0	6.7
10	78.4	85.1	90.0	95.1	95.1	16.7	6.7
13	82.6	88.6	93.0	97.9	97.9	15.3	6.0
16	85.6	91.1	94.0	99.1	99.1	13.5	5.5
19	84.4	91.1	95.4	99.3	99.3	14.9	6.7
22	80.5	88.8	94.7	97.7	97.7	17.2	8.3
25	79.2	86.7	92.0	96.1	96.1	16.9	7.5
28	79.5	86.2	91.8	95.9	95.9	16.4	6.7
31	78.0	85.5	92.0	95.6	95.6	17.6	7.5
34	78.7	86.7	93.5	96.7	96.7	18.0	8.0
37	85.0	90.5	95.3	99.0	99.0	14.0	5.5
40	82.7	87.4	93.1	97.0	97.0	14.3	4.7
43	86.2	90.5	94.9	99.2	100.6	13.0	4.3
46	83.9	89.5	95.0	98.6	98.6	14.7	5.6
49	81.4	87.3	93.5	96.8	98.0	15.4	5.9
52	82.8	89.2	95.2	98.8	100.1	16.0	6.4
55	83.8	89.2	94.5	98.6	100.3	14.8	5.4
58	86.6	92.2	97.4	101.2	102.5	14.6	5.6
61	85.7	91.1	96.5	100.3	100.3	14.6	5.4
64	86.9	92.2	97.1	101.2	101.2	14.3	5.3
67	84.4	90.2	95.8	99.1	100.7	14.7	5.8
70	86.5	92.9	97.9	101.9	101.9	15.4	6.4
73	89.2	94.6	99.1	102.6	102.6	13.4	5.4
76	91.5	96.7	100.8	105.0	105.0	13.5	5.2
79	91.5	97.0	99.8	104.1	104.1	12.6	5.5
82	89.0	95.0	97.8	102.4	102.4	13.4	6.0
O.H. - 82 → 83							
85	90.5	96.3	100.3	103.8	103.8	13.3	5.8
88	86.5	92.9	98.7	100.9	100.9	14.4	6.4
91	85.9	91.5	98.0	99.1	100.2	13.2	5.6
94	82.7	88.2	95.6	96.7	98.1	14.0	5.5
97	79.6	85.8	92.2	94.8	96.3	15.2	6.2
100	77.1	83.3	89.6	93.3	93.3	16.2	6.2
103	77.4	83.6	88.7	93.3	93.3	15.9	6.2
106	74.4	81.3	87.6	92.5	92.5	18.1	6.9
109	73.8	80.9	87.0	92.0	92.0	18.2	7.1

# TABLE H-V

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 22, 100 KI. FLY BY, CENTERLINE MIC. ( SOFI SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
7	69.5	79.8	86.5	92.1	92.1	22.6	10.3
9	74.1	82.2	89.3	93.2	93.2	19.1	8.1
11	75.7	83.5	90.6	93.8	93.8	18.1	7.8
13	75.0	83.9	91.6	94.0	94.0	19.0	8.9
15	76.3	85.4	92.5	95.0	95.0	18.7	9.1
17	77.3	86.7	93.6	95.9	95.9	18.6	9.4
19	77.0	86.8	94.3	96.1	96.1	19.1	9.8
21	77.4	87.4	94.9	96.3	96.3	18.9	10.0
23	78.0	87.5	95.2	96.7	96.7	18.7	9.5
25	78.9	87.6	95.2	96.8	96.8	17.9	8.7
27	79.0	87.5	94.8	96.7	96.7	17.7	8.5
29	78.9	87.5	94.9	96.7	96.7	17.8	8.6
31	78.2	87.0	94.9	96.3	96.3	18.1	8.8
33	77.2	86.5	95.1	95.7	95.7	18.5	9.3
35	76.3	86.4	95.6	95.7	95.7	19.4	10.1
37	77.9	87.5	96.3	96.5	96.5	18.6	9.6
39	82.3	88.8	97.1	97.9	97.9	15.6	6.5
41	86.2	91.5	97.8	100.3	100.3	14.1	5.3
43	86.1	91.5	97.1	100.2	100.2	14.1	5.4
45	81.3	88.3	96.3	97.4	97.4	16.1	7.0
47	82.7	89.4	96.4	98.0	98.0	15.3	6.7
49	86.2	91.3	96.6	100.1	100.1	13.9	5.1
51	88.6	93.1	96.9	101.5	101.5	12.9	4.5
53	86.5	92.1	96.0	100.7	100.7	14.2	5.6
O.H. <del>55</del> → 56	82.5	90.8	95.9	98.6	98.6	16.1	8.3
57	84.0	92.3	97.7	100.1	100.1	16.1	8.3
59	83.3	91.8	97.5	99.9	99.9	16.6	8.5
61	83.5	91.0	97.0	99.3	99.3	15.8	7.5
63	83.8	90.1	95.6	98.2	98.2	14.4	6.3
65	81.6	87.6	93.0	96.5	96.5	14.9	6.0
67	79.1	85.2	90.5	94.5	94.5	15.4	6.1
69	77.2	83.3	87.9	93.1	93.1	15.9	6.1
71	74.8	81.5	84.9	92.0	92.0	17.2	6.7
73	72.9	80.1	83.7	91.5	91.5	18.6	7.2
75	72.3	79.4	82.6	91.3	91.3	19.0	7.1
77	69.4	78.4	81.4	91.1	91.1	21.7	9.0
79	70.9	79.0	81.2	91.2	91.2	20.3	8.1

# TABLE H-II

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 23, 100 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
4	66.4	77.7	79.9	91.0	91.0	24.6	11.3
7	67.8	78.7	81.2	91.4	91.4	23.6	10.9
10	68.8	78.9	81.7	91.5	91.5	22.7	10.1
13	68.2	78.5	81.5	91.4	91.4	23.2	10.3
16	67.5	78.4	82.4	91.5	91.5	24.0	10.9
19	67.1	78.8	83.5	91.6	91.6	24.5	11.7
22	68.0	79.5	85.5	91.9	91.9	23.9	11.5
25	70.2	81.0	88.5	92.6	92.6	22.4	10.8
28	72.2	82.7	90.8	93.3	93.3	21.1	10.5
31	72.6	83.4	92.1	93.6	93.6	21.0	10.8
34	75.5	85.7	94.0	95.5	95.5	20.0	10.2
37	76.3	86.5	94.8	95.9	95.9	19.6	10.2
40	75.7	85.9	94.2	95.4	95.4	19.7	10.2
43	75.3	85.8	93.9	95.2	95.2	19.9	10.5
46	77.4	87.2	95.5	96.4	96.4	19.0	9.8
49	76.9	86.8	95.5	96.1	96.1	19.2	9.9
52	77.2	87.7	96.8	96.5	96.5	19.3	10.5
55	78.7	88.8	98.0	97.8	97.8	19.1	10.1
58	80.2	88.4	97.8	97.6	97.6	17.4	8.2
61	79.4	87.8	97.3	96.4	96.4	17.0	8.4
64	81.3	89.0	96.1	97.3	97.3	16.0	7.7
O.H. <del>67</del> → 69	81.5	89.5	94.9	97.9	97.9	16.4	8.0
70	82.7	90.8	96.5	99.2	99.2	16.5	8.1
73	83.1	91.1	96.9	99.4	99.4	16.3	8.0
74	83.9	91.2	97.0	99.7	99.7	15.8	7.3
77	81.8	87.8	93.3	96.4	96.4	14.6	6.0
80	78.8	85.6	90.7	94.5	94.5	15.7	6.8
83	76.1	82.8	87.6	92.8	92.8	16.7	6.7
86	73.1	80.1	83.5	91.4	91.4	18.3	7.0
89	71.6	79.5	81.0	91.2	91.2	19.6	7.9
92	72.7	79.8	80.8	91.2	91.2	18.5	7.1
95	69.0	78.3	78.6	90.9	90.9	21.9	9.3
98	68.8	78.4	77.6	90.9	90.9	22.1	9.6
101	67.4	78.0	76.8	90.8	90.8	23.4	10.6
104	66.0	77.7	75.6	90.7	90.7	24.7	11.7



# TABLE H-V

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 24, 141 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLF	PNL-DBA	DBD-DBA
1	73.0	81.8	87.0	92.8	92.8	19.8	8.8
3	74.0	82.5	89.1	93.2	93.2	19.2	8.5
5	75.4	84.5	91.6	93.9	93.9	18.5	9.1
7	78.3	87.1	94.1	96.0	96.0	17.7	8.8
9	83.6	91.2	98.2	100.1	100.1	16.5	7.6
11	86.9	95.3	101.7	103.4	103.4	16.5	8.4
13	89.5	97.9	103.9	105.1	105.1	15.6	8.4
15	91.0	99.0	104.8	106.1	106.1	15.1	8.0
17	90.5	98.8	104.5	105.9	105.9	15.4	8.3
19	88.5	96.7	103.1	104.4	105.4	15.9	8.2
21	86.4	93.9	101.4	102.6	102.6	16.2	7.5
23	84.9	92.2	100.4	101.2	101.2	16.3	7.3
25	85.9	94.2	101.9	102.1	102.1	16.2	8.3
27	86.9	96.2	103.6	103.6	103.6	16.7	9.3
29	87.3	97.0	105.0	104.4	104.4	17.1	9.7
31	87.4	97.4	105.6	104.8	104.8	17.4	10.0
33	85.5	95.2	104.1	103.7	104.9	18.2	9.7
35	84.3	93.9	103.4	102.3	102.3	18.0	9.6
37	86.3	94.7	102.8	101.9	101.9	15.6	8.4
O.H. 39 → 40	88.2	95.7	101.6	103.2	103.2	15.0	7.5
41	88.1	95.6	101.7	103.6	103.6	15.5	7.5
43	86.9	94.2	99.8	102.6	102.6	15.7	7.3
45	84.8	90.8	96.8	99.3	99.3	14.5	6.0
47	81.2	86.9	92.8	95.6	95.6	14.4	5.7
49	78.4	84.6	89.7	93.7	93.7	15.3	6.2
51	76.5	82.8	87.2	92.7	92.7	16.2	6.3
53	74.1	80.9	84.5	91.7	91.7	17.6	6.8

TABLE H-V

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 25, 141 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	76.6	85.0	91.6	94.9	94.9	18.3	8.4
2	77.0	85.8	93.1	95.8	95.8	18.8	8.8
3	77.7	87.0	94.9	96.8	96.8	19.1	9.3
4	79.1	89.0	96.9	98.0	98.0	18.9	9.9
5	81.0	91.0	98.8	99.6	99.6	18.6	10.0
6	83.2	93.1	100.7	101.6	101.6	18.4	9.9
7	85.3	95.0	102.4	103.3	103.3	18.0	9.7
8	87.1	96.7	103.9	104.9	104.9	17.8	9.6
9	89.8	98.5	105.1	106.4	106.4	16.5	8.7
10	91.8	100.1	106.1	107.6	107.6	15.8	8.3
11	92.6	100.7	106.5	108.1	108.1	15.5	8.1
12	92.7	100.5	106.3	107.7	107.7	15.0	7.8
13	91.9	99.7	105.6	107.0	107.0	15.1	7.8
14	91.0	99.2	105.1	106.3	106.3	15.3	8.2
15	90.1	98.8	104.9	105.7	105.7	15.6	8.7
16	89.7	98.7	105.0	105.8	105.8	16.1	9.0
17	89.3	98.2	104.9	105.5	105.5	16.2	8.9
18	88.7	97.4	104.4	105.0	105.0	16.3	8.7
19	87.7	96.1	103.8	104.0	104.0	16.3	8.4
20	86.6	95.0	103.2	103.4	103.4	16.8	8.4
21	86.0	94.5	103.3	103.1	103.1	17.1	8.5
22	86.2	94.9	103.7	103.2	103.2	17.0	8.7
23	86.7	95.6	104.3	103.7	103.7	17.0	8.9
24	86.8	95.9	104.7	103.9	103.9	17.1	9.1
25	86.3	96.1	104.9	104.1	104.1	17.8	9.8
26	85.8	96.0	104.9	104.3	104.3	18.5	10.2
27	85.4	95.8	104.7	104.2	104.2	18.8	10.4
28	84.8	95.0	104.1	103.6	103.6	18.8	10.2
29	84.9	94.6	103.5	102.7	102.7	17.8	9.7
30	85.9	94.7	103.1	102.0	102.0	16.1	8.8
31	86.7	95.1	102.2	102.4	102.4	15.7	8.4
O.H. → 32	87.1	95.0	101.3	102.6	102.6	15.5	7.9
33	86.7	94.5	100.9	102.4	102.4	15.7	7.8
34	86.4	94.2	100.8	102.5	102.5	16.1	7.8
35	85.9	93.6	100.3	102.1	102.1	16.2	7.7
36	86.1	93.5	99.4	102.0	102.0	15.9	7.4
37	85.9	92.6	98.6	101.3	101.3	15.4	6.7
38	85.3	91.7	97.4	100.0	100.0	14.7	6.4
39	83.8	89.5	95.3	98.1	98.1	14.3	5.7
40	82.1	88.0	93.6	96.6	96.6	14.5	5.9
41	80.1	86.3	92.1	95.1	95.1	15.0	6.2
42	78.3	84.6	90.5	93.9	93.9	15.6	6.3

# TABLE H-V

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 26, 141 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICHO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	76.8	85.7	92.0	94.9	94.9	18.1	8.9
2	77.2	85.8	92.7	94.9	94.9	17.7	8.6
3	77.6	86.4	94.2	96.1	96.1	18.5	8.8
4	79.3	89.0	96.8	97.9	97.9	18.6	9.7
5	83.8	93.5	100.2	101.5	101.5	17.7	9.7
6	88.2	97.2	103.2	104.5	104.5	16.3	9.0
7	91.8	100.1	105.3	106.5	106.5	14.7	8.3
8	92.9	100.9	106.1	107.4	107.4	14.5	8.0
9	92.4	100.2	105.6	107.0	107.0	14.6	7.8
10	90.2	98.0	104.2	105.8	105.8	15.6	7.8
11	88.2	96.1	102.9	104.3	104.3	16.1	7.9
12	87.6	95.8	102.5	103.9	103.9	16.3	8.2
13	86.9	95.5	102.4	103.5	103.5	16.6	8.6
14	86.1	94.8	102.2	103.0	103.0	16.9	8.7
15	86.0	94.4	102.5	102.9	102.9	16.9	8.4
16	86.9	95.1	103.0	103.2	103.2	16.3	8.2
17	87.5	95.9	103.5	103.9	103.9	16.4	8.4
18	88.6	96.7	104.4	104.9	104.9	16.3	8.1
19	89.7	97.8	105.3	106.1	106.1	16.4	8.1
20	89.7	97.9	105.5	106.3	106.3	16.6	8.2
21	88.6	97.1	104.9	105.4	105.4	16.8	8.5
22	86.5	95.5	104.1	104.0	104.0	17.5	9.0
23	85.6	95.2	104.0	103.6	104.7	18.0	9.6
24	86.1	95.7	104.3	104.0	105.2	17.9	9.6
25	86.2	95.5	104.2	104.0	104.0	17.8	9.3
26	86.7	95.3	103.7	103.7	103.7	17.0	8.6
27	87.1	95.2	103.3	103.1	103.1	16.0	8.1
28	88.0	95.6	103.1	103.3	103.3	15.3	7.6
29	86.4	95.8	102.7	103.4	103.4	15.0	7.4
30	89.0	96.2	102.3	103.8	103.8	14.8	7.2
O.H. → 31	88.6	95.8	101.8	103.5	103.5	14.9	7.2
32	87.7	95.0	101.4	103.2	103.2	15.5	7.3
33	86.4	93.9	100.6	102.5	102.5	16.1	7.5
34	85.7	93.2	99.5	101.8	101.8	16.1	7.5
35	85.5	92.3	98.4	100.9	100.9	15.6	7.0
36	84.4	90.9	97.2	99.3	99.3	14.9	6.5
37	83.9	89.8	95.7	97.9	97.9	14.0	5.9
38	82.6	88.2	94.3	96.9	96.9	14.3	5.6
39	81.0	86.7	92.6	95.5	95.5	14.5	5.7
40	79.3	85.1	90.9	94.1	94.1	14.8	5.8

# TABLE H-V

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 27, 141 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	80.1	87.5	94.8	97.1	97.1	17.0	7.4
2	79.6	87.4	96.0	97.5	97.5	17.9	7.8
3	80.1	88.2	97.2	98.7	98.7	18.6	8.1
4	83.7	91.5	99.3	100.8	100.8	17.1	7.8
5	90.4	97.9	102.8	105.4	105.4	15.0	7.5
6	94.3	101.6	106.2	108.5	108.5	14.2	7.3
7	96.0	103.3	107.7	110.0	110.0	14.0	7.3
8	95.9	103.2	107.9	110.0	110.0	14.1	7.3
9	95.1	102.4	107.2	109.3	109.3	14.2	7.3
10	93.6	101.3	106.7	108.3	109.3	14.7	7.7
11	94.4	102.1	107.3	108.8	110.6	14.4	7.7
12	93.9	102.3	108.1	109.1	110.8	15.2	8.4
13	93.8	102.4	108.6	109.7	111.1	15.9	8.6
14	92.7	101.9	108.6	109.6	109.6	16.9	9.2
15	92.5	101.3	108.2	109.4	109.4	16.9	8.8
16	91.7	100.5	107.7	108.4	108.4	16.7	8.8
17	90.1	99.2	106.9	107.1	107.1	17.0	9.1
18	89.6	98.3	106.3	106.0	107.2	16.4	8.7
19	89.2	97.8	105.7	105.5	106.5	16.3	8.6
20	88.9	97.1	105.1	105.1	105.1	16.2	8.2
21	88.9	96.8	104.8	104.5	104.5	15.6	7.9
22	89.2	96.6	104.7	104.6	104.6	15.4	7.4
23	89.1	96.5	104.2	104.1	104.1	15.0	7.4
24	88.7	96.3	103.0	103.9	103.9	15.2	7.6
25	89.2	96.7	102.6	104.4	104.4	15.2	7.5
O.H. → 26	89.7	97.1	102.8	104.8	104.8	15.1	7.4
27	89.3	96.8	102.8	104.8	104.8	15.5	7.5
28	88.7	96.1	102.0	104.1	104.1	15.4	7.4
29	87.9	94.8	100.9	103.4	103.4	15.5	6.9
30	87.0	93.5	99.8	102.0	102.0	15.0	6.5
31	85.4	91.5	98.0	100.3	100.3	14.9	6.2
32	82.9	88.7	95.3	97.1	97.1	14.2	5.8
33	81.1	86.8	92.9	95.6	95.6	14.5	5.7
34	79.3	85.0	90.5	94.2	94.2	14.9	5.7

# TABLE H-II

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 28, 150 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	76.9	85.9	93.2	.0	.0	-76.8	9.0
2	79.4	88.9	96.0	97.7	97.7	18.3	9.5
3	82.2	92.0	98.8	99.9	99.9	17.7	9.8
4	84.6	94.5	100.9	102.0	102.0	17.4	9.9
5	88.4	97.0	103.2	104.3	104.3	15.9	8.6
6	90.7	99.1	105.3	106.3	106.3	15.6	8.4
7	93.0	101.3	107.3	108.2	108.2	15.2	8.3
8	96.0	103.8	108.9	110.3	110.3	14.3	7.8
9	97.4	104.8	109.8	111.2	111.2	13.8	7.4
10	97.6	104.9	109.3	111.4	111.4	13.8	7.3
11	96.2	103.8	109.0	110.5	110.5	14.3	7.6
12	94.2	102.2	107.9	109.4	109.4	15.2	8.0
13	92.5	100.6	107.0	108.3	108.3	15.8	8.1
14	92.3	99.8	106.6	107.8	107.8	15.5	7.5
15	92.3	100.0	107.0	107.9	107.9	15.6	7.7
16	92.3	100.5	107.5	108.2	108.2	15.9	8.2
17	92.3	100.9	107.9	108.5	108.5	16.2	8.6
18	92.1	100.9	108.0	108.4	108.4	16.3	8.8
19	91.7	100.5	107.9	108.0	108.0	16.3	8.8
20	90.6	99.6	107.5	107.3	107.3	16.7	9.0
21	90.1	98.6	106.9	106.7	106.7	16.6	8.5
22	90.1	97.8	106.2	106.1	106.1	16.0	7.7
23	91.0	98.1	106.0	105.8	105.8	14.8	7.1
24	91.2	98.1	105.4	105.9	105.9	14.7	6.9
0.11 → 25	91.1	97.9	104.6	105.7	105.7	14.6	6.8
26	90.1	97.1	103.1	104.9	104.9	14.8	7.0
27	89.8	96.7	102.6	104.8	104.8	15.0	6.9
28	89.2	96.1	101.8	104.3	104.3	15.1	6.9
29	88.9	95.4	101.0	103.6	103.6	14.7	6.5
30	87.4	93.5	99.2	101.7	101.7	14.3	6.1
31	85.6	91.3	97.0	100.0	100.0	14.4	5.7
32	83.3	88.6	94.5	97.5	97.5	14.2	5.3
33	81.4	87.0	92.8	95.7	95.7	14.3	5.6

# TABLE H-V

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 29, 150 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	82.9	89.1	95.2	98.4	98.4	15.5	6.2
2	84.2	90.7	97.3	99.6	99.6	15.4	6.5
3	86.0	92.9	99.8	101.4	101.4	15.4	6.9
4	87.1	94.7	101.9	103.2	103.2	16.1	7.6
5	89.6	97.2	104.5	105.7	105.7	16.1	7.6
6	90.7	99.2	106.4	107.4	107.4	16.7	8.5
7	92.9	101.2	107.9	109.2	109.2	16.3	8.3
8	96.1	103.5	109.1	111.1	111.1	15.0	7.4
9	98.2	104.8	109.8	112.3	112.3	14.1	6.6
10	98.9	105.3	110.2	112.9	112.9	14.0	6.4
11	98.8	105.6	110.5	113.3	113.3	14.5	6.8
12	99.3	106.3	110.9	113.5	113.5	14.2	7.0
13	99.2	106.6	111.1	113.4	113.4	14.2	7.4
14	99.3	106.3	110.8	113.2	113.2	13.9	7.0
15	98.4	105.5	110.7	112.8	112.8	14.4	7.1
16	97.8	104.7	110.3	112.4	112.4	14.6	6.9
17	96.3	103.9	110.1	111.6	111.6	15.3	7.6
18	94.4	102.5	109.2	110.2	110.2	15.8	8.1
19	92.7	101.2	108.5	108.8	108.8	16.1	8.5
20	90.5	99.5	107.3	107.3	108.3	16.8	9.0
21	89.3	98.4	106.8	106.3	106.3	17.0	9.1
22	89.1	97.8	106.6	105.5	105.5	16.4	8.7
23	90.7	98.4	106.5	105.9	105.9	15.2	7.7
24	91.6	98.8	105.7	106.7	106.7	15.1	7.2
OH → 25	92.0	99.0	105.0	106.7	106.7	14.7	7.0
26	91.7	98.5	104.2	106.3	106.3	14.6	6.8
27	91.3	98.0	103.9	106.0	106.0	14.7	6.7
28	90.7	97.3	102.8	105.4	105.4	14.7	6.6
29	90.2	96.6	101.8	104.4	104.4	14.2	6.4
30	88.8	95.1	100.3	103.1	103.1	14.3	6.3
31	86.8	92.8	98.2	101.2	101.2	14.4	6.0
32	83.5	89.1	94.8	98.2	98.2	14.7	5.6
33	81.3	86.9	92.3	95.8	95.8	14.5	5.6

# TABLE H-IV

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 30, 125 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	70.6	80.9	87.5	92.4	92.4	21.8	10.3
2	71.9	82.1	89.4	92.8	92.8	20.9	10.2
3	74.0	83.9	91.7	93.6	93.6	19.6	9.9
4	76.7	86.3	94.0	95.4	95.4	18.7	9.6
5	79.0	88.3	96.2	97.5	97.5	18.5	9.3
6	81.0	90.2	98.6	99.3	99.3	18.3	9.2
7	83.1	92.7	100.8	101.2	101.2	18.1	9.0
8	86.2	95.5	103.0	103.5	103.5	17.3	9.3
9	88.5	97.6	104.5	104.9	104.9	16.4	9.1
10	88.8	98.0	104.9	105.1	105.1	16.3	9.2
11	87.6	97.1	104.2	104.3	104.3	16.7	9.5
12	84.7	94.8	102.7	102.5	102.5	17.8	10.1
13	82.2	92.4	101.1	100.7	100.7	18.5	10.2
14	80.8	90.7	100.0	99.8	99.8	19.0	9.9
15	80.9	90.7	100.3	99.9	99.9	19.0	9.8
16	83.0	92.0	101.5	101.0	102.0	18.0	9.0
17	83.5	92.5	102.3	101.5	102.6	18.0	9.0
18	83.6	92.7	102.5	101.8	101.8	18.2	9.1
19	83.0	92.6	102.4	101.8	101.8	18.8	9.6
20	83.1	92.6	102.3	101.8	101.8	18.7	9.5
21	83.2	92.4	102.0	101.8	101.8	18.6	9.2
22	83.5	92.2	101.7	101.9	101.9	18.4	8.7
23	83.3	91.6	101.3	101.3	101.3	18.0	8.3
24	83.2	91.0	100.8	100.3	100.3	17.1	7.8
25	83.9	91.8	100.3	100.0	100.0	16.1	7.9
26	84.7	92.9	99.6	100.5	100.5	15.8	8.2
27	85.3	93.4	99.1	101.0	101.0	15.7	8.1
O.H. → 28	85.3	93.4	99.6	101.5	101.5	16.2	8.1
29	86.0	93.5	100.2	102.1	102.1	16.1	7.5
30	86.0	93.4	100.2	102.0	102.0	16.0	7.4
31	85.5	92.7	99.1	101.2	101.2	15.7	7.2
32	84.8	91.5	97.9	100.2	100.2	15.4	6.7
33	84.3	90.3	96.7	98.8	98.8	14.5	6.0
34	83.7	89.0	95.4	97.5	97.5	13.8	5.3
35	82.2	87.5	93.6	96.2	96.2	14.0	5.3
36	80.7	86.1	92.1	94.9	94.9	14.2	5.4
37	79.3	85.2	91.3	94.2	94.2	14.9	5.9
38	78.1	84.0	90.2	93.5	93.5	15.4	5.9
39	76.7	83.0	89.4	92.9	92.9	16.2	6.3

# TABLE H-II

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 31, 126 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INI	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	70.7	80.9	86.7	92.3	92.3	21.6	10.2
2	72.4	82.0	88.2	92.7	92.7	20.3	9.6
3	74.0	83.2	89.7	93.3	93.3	19.3	9.2
4	75.4	84.2	91.0	94.0	94.0	18.6	8.8
5	76.0	84.8	92.1	94.3	94.3	18.3	8.8
6	76.2	85.2	93.1	95.0	95.0	18.8	9.0
7	76.8	86.3	94.6	96.1	96.1	19.3	9.5
8	78.8	88.0	96.4	97.6	97.6	18.8	9.2
9	81.2	90.2	98.5	99.5	99.5	18.3	9.0
10	83.2	92.2	100.5	101.1	101.1	17.9	9.0
11	85.1	94.1	102.1	102.2	102.2	17.1	9.0
12	86.8	95.5	103.0	103.4	103.4	16.6	8.7
13	87.8	96.3	103.3	103.9	103.9	16.1	8.5
14	87.9	96.3	103.3	103.9	103.9	16.0	8.4
15	87.2	95.6	103.2	103.6	103.6	16.4	8.4
16	86.3	94.6	103.0	103.2	103.2	16.9	8.3
17	85.8	94.5	102.8	102.9	102.9	17.1	8.7
18	86.2	95.1	102.8	102.8	102.8	16.6	8.9
19	86.5	95.2	102.8	102.7	102.7	16.2	8.7
20	86.3	95.0	102.6	102.6	102.6	16.3	8.7
21	85.7	94.3	102.2	102.5	102.5	16.8	8.6
22	85.2	94.1	102.3	102.4	102.4	17.2	8.9
23	84.7	93.8	102.4	102.2	102.2	17.5	9.1
24	84.1	93.4	102.3	102.0	102.0	17.9	9.3
25	83.8	92.8	102.2	101.9	101.9	18.1	9.0
26	83.2	92.1	102.1	101.8	101.8	18.6	8.9
27	83.4	91.7	101.9	101.5	101.5	18.1	8.3
28	83.8	92.3	101.6	101.0	101.0	17.2	8.5
29	85.3	93.2	100.7	101.5	101.5	16.2	7.9
30	86.9	94.6	100.3	102.5	102.5	15.6	7.7
31	87.3	94.8	100.1	102.8	102.8	15.5	7.5
0.4 → 32	87.6	95.1	100.9	103.0	103.0	15.4	7.5
33	87.4	95.1	101.3	103.0	103.0	15.6	7.7
34	87.1	95.0	101.1	102.8	102.8	15.7	7.9
35	86.0	93.7	99.8	101.9	101.9	15.9	7.7
36	85.3	92.2	98.1	100.7	100.7	15.4	6.9
37	84.6	90.5	96.6	98.9	98.9	14.3	5.9
38	83.7	89.3	95.0	97.5	97.5	13.8	5.6
39	81.2	86.8	92.8	95.4	95.4	14.2	5.6
40	79.0	84.7	90.2	93.7	93.7	14.7	5.7
41	77.3	83.6	88.6	92.9	92.9	15.6	6.3
42	77.0	83.5	87.8	92.8	92.8	15.8	6.5



# TABLE H-V

## NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 35, 3 DEGREE APPROACH, CENTERLINE MIC. ( SOFT SITE )

1/2 SECOND INTEGRATION VS NOISE INDEXES  
(DB RE 20 MICRO PA)

INT	DBA	DBD	OASPL	PNL	PNLT	PNL-DBA	DBD-DBA
1	78.1	85.9	91.3	95.8	95.8	17.7	7.8
4	81.4	88.3	92.8	97.1	97.1	15.7	6.9
7	81.2	87.8	93.3	97.2	97.2	16.0	6.6
10	81.0	88.8	93.8	97.6	97.6	16.6	7.8
13	81.5	88.6	93.5	98.2	98.2	16.7	7.1
16	80.9	89.0	93.7	97.5	97.5	16.6	8.1
19	82.4	89.4	94.4	98.1	98.1	15.7	7.0
22	82.2	89.5	94.3	98.1	98.1	15.9	7.3
25	80.7	88.6	93.9	97.4	97.4	16.7	7.9
28	79.2	86.7	92.2	96.1	96.1	16.9	7.5
31	76.2	84.5	90.9	94.5	94.5	18.3	8.3
34	73.1	82.3	90.1	93.4	93.4	20.3	9.2
37	73.8	82.4	89.9	93.4	93.4	19.6	8.6
40	74.6	83.1	90.0	93.6	93.6	19.0	8.5
43	76.2	83.7	89.7	93.9	93.9	17.7	7.5
46	76.1	84.2	89.3	93.9	93.9	17.8	8.1
49	80.1	86.0	91.4	95.6	95.6	15.5	5.9
52	78.4	85.3	91.9	95.4	95.4	17.0	6.9
55	81.0	86.9	93.4	96.9	96.9	15.9	5.9
58	80.5	87.2	93.2	96.5	98.1	16.0	6.7
61	83.6	89.3	94.2	98.1	98.1	14.5	5.7
64	84.1	89.3	94.6	99.1	100.7	15.0	5.2
67	85.6	90.5	95.0	99.3	99.3	13.7	4.9
70	86.5	91.7	97.7	101.1	102.2	14.6	5.2
73	88.8	94.0	98.3	102.5	102.5	13.7	5.2
76	90.8	95.7	99.7	103.9	103.9	13.1	4.9
79	92.5	98.3	101.9	106.6	106.6	14.1	5.8
82	93.8	99.2	102.8	107.4	107.4	13.6	5.4
O.H.→ 85	93.7	99.7	103.2	107.1	107.1	13.4	6.0
87	94.4	100.8	104.6	107.6	107.6	13.2	6.4
90	91.1	97.7	102.5	105.2	105.2	14.1	6.6
93	90.9	97.4	102.3	104.7	104.7	13.8	6.5
96	85.7	91.6	97.3	99.6	99.6	13.9	5.9
99	83.8	89.8	94.5	98.4	99.5	14.6	6.0
102	79.1	85.3	91.2	94.6	94.6	15.5	6.2
105	75.6	82.6	89.2	93.1	94.3	17.5	7.0
108	74.6	81.6	87.4	92.3	92.3	17.7	7.0
111	70.5	79.4	85.7	.0	.0	-70.4	8.9

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 12, 6 DEGREE APPROACH, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-22.0	-18.0	-14.0	-10.0	-6.0	-2.0	0	2.0	6.0	7.0
17	84.3	86.9	89.1	89.1	86.9	89.5	90.9	90.5	82.4	82.5
18	85.8	84.1	86.4	87.7	80.0	90.0	89.5	85.3	84.5	85.4
19	84.8	82.8	84.5	83.7	73.9	85.9	86.1	79.9	77.2	79.2
20	82.7	81.7	83.7	79.3	77.2	85.4	81.7	79.2	76.1	80.9
21	74.2	75.7	78.6	80.8	79.5	76.1	76.0	71.8	78.1	77.8
22	76.8	78.5	80.0	79.1	74.7	84.1	83.7	77.4	75.4	77.5
23	81.9	76.6	79.1	73.1	85.0	87.9	88.0	84.5	72.6	69.0
24	76.7	77.9	74.5	83.1	89.9	88.3	84.5	85.6	78.5	73.3
25	76.1	72.4	71.5	82.6	86.2	81.8	79.8	82.5	80.2	78.1
26	73.1	61.6	74.7	83.1	82.9	73.6	76.5	73.6	79.9	79.3
27	73.2	71.8	77.5	82.0	80.3	76.8	78.8	79.4	73.4	77.0
28	74.3	74.3	78.2	74.8	81.3	72.2	74.4	74.4	72.1	69.9
29	76.1	73.5	71.5	79.4	76.5	73.8	74.2	75.6	72.8	72.9
30	71.3	65.7	68.2	72.8	77.9	71.9	71.6	72.5	70.3	67.8
31	68.0	64.4	67.6	74.7	75.0	69.0	69.5	69.9	67.4	67.3
32	65.8	64.5	64.8	71.8	72.3	69.3	69.8	70.5	69.0	67.4
33	63.2	61.2	62.3	67.7	68.9	66.2	66.2	66.6	63.2	62.2
34	57.9	57.3	57.2	64.3	65.6	63.7	63.9	65.1	60.5	59.9
35	55.0	55.2	55.0	59.6	63.1	62.4	62.7	65.3	59.7	59.2
36	55.0	55.0	55.0	55.9	59.7	60.6	61.3	62.4	57.4	56.3
37	55.0	55.0	55.0	55.0	55.8	57.4	58.3	59.1	55.5	55.0
38	55.0	55.0	55.0	55.0	55.0	55.1	55.4	56.1	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	80.9	79.3	81.6	86.4	88.4	85.3	84.5	84.5	81.3	80.7
D	86.2	84.3	86.7	91.3	93.2	92.1	91.1	90.5	86.7	86.0
OASPL	92.5	92.8	94.2	95.2	96.6	97.9	97.0	95.5	91.1	91.5
PNL	94.7	92.8	94.8	98.4	100.6	99.7	99.2	98.2	94.8	94.4
PNLT	95.6	92.8	96.0	100.3	100.6	99.7	99.2	98.2	96.0	95.7

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 22, 100 KT. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-17.0	-14.0	-11.0	-8.0	-5.0	-2.0	0	1.0	4.0	7.0
17	76.7	80.4	85.1	88.0	88.3	85.2	85.8	85.9	86.2	79.0
18	83.6	82.3	85.2	88.7	89.7	80.3	89.0	87.4	81.2	74.9
19	84.0	84.7	86.1	81.0	87.9	80.7	87.5	85.3	76.4	68.6
20	78.7	76.6	83.7	81.5	83.3	84.3	83.7	78.7	68.7	70.3
21	76.8	75.9	76.2	75.7	79.6	78.6	75.5	73.9	64.1	69.0
22	73.0	72.7	74.8	78.3	79.4	73.4	82.6	78.1	72.4	59.6
23	69.9	72.9	74.8	80.4	73.8	80.6	84.2	80.9	75.7	65.8
24	62.0	69.0	74.4	77.6	72.1	80.1	83.9	79.0	76.5	69.4
25	58.0	64.5	71.9	71.8	71.8	81.2	75.1	70.0	74.5	72.2
26	57.0	62.0	70.7	65.7	77.0	77.6	71.2	71.8	70.9	70.3
27	60.0	58.4	67.3	70.9	76.3	74.1	71.1	68.9	74.7	65.9
28	62.2	57.1	66.1	73.1	67.3	74.2	67.4	69.7	69.5	69.2
29	62.6	61.3	64.7	71.0	67.1	71.2	67.0	69.0	72.3	64.8
30	57.3	61.1	61.2	64.4	66.4	72.0	67.0	67.2	71.3	65.8
31	55.0	56.6	59.7	64.4	61.8	71.1	65.4	65.2	68.2	63.1
32	55.0	55.4	57.4	60.7	63.1	68.5	68.3	68.1	69.2	63.5
33	55.0	55.0	55.0	60.7	62.6	66.3	64.4	64.1	66.4	59.7
34	55.0	55.0	55.0	55.6	58.4	63.1	62.0	61.7	62.9	57.4
35	55.0	55.0	55.0	55.0	57.0	61.3	61.5	60.8	62.0	56.1
36	55.0	55.0	55.0	55.0	55.1	59.2	59.5	59.4	59.9	55.0
37	55.0	55.0	55.0	55.0	55.0	56.7	57.8	57.7	57.3	55.0
38	55.0	55.0	55.0	55.0	55.0	55.0	55.1	55.0	55.1	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	70.4	71.2	75.6	78.4	79.2	82.2	81.2	79.2	80.1	75.1
D	80.7	81.7	84.4	85.4	87.0	88.1	88.9	86.7	85.4	80.4
OASFL	90.8	92.0	93.7	94.3	94.9	94.1	96.1	95.2	91.2	87.2
PNL	88.4	89.1	91.9	93.4	94.4	95.8	96.4	94.1	92.6	87.8
PNLT	88.4	89.1	91.9	93.4	94.4	95.8	97.6	95.3	92.6	89.0

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 23, 100 KT. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-18.5	-15.0	-11.5	-8.0	-4.5	-1.0	0	.5	2.5	6.0	8.0
17	77.1	83.2	83.7	88.2	86.5	85.4	84.8	85.9	85.6	79.3	73.2
18	79.5	85.1	84.1	89.0	89.2	86.8	88.8	88.7	80.8	75.8	69.7
19	82.3	88.4	86.2	80.9	88.2	86.5	87.0	86.3	80.3	74.5	73.3
20	76.7	81.2	80.8	83.6	84.6	85.5	82.7	80.4	71.2	75.0	71.5
21	73.5	82.4	78.5	76.7	80.3	74.1	74.0	74.7	68.5	71.5	68.2
22	70.3	76.9	74.6	72.1	76.4	79.5	79.5	79.6	78.5	60.6	62.3
23	67.0	76.0	76.1	74.5	69.0	80.7	81.6	81.7	79.7	67.3	58.2
24	58.4	68.5	74.6	69.0	73.8	80.6	79.7	80.1	78.5	73.2	62.1
25	55.0	65.4	70.6	62.4	73.6	74.8	72.6	71.9	71.7	74.3	65.2
26	55.0	55.2	65.6	59.4	76.5	69.1	70.8	72.2	73.7	73.2	68.4
27	55.1	55.8	63.4	65.9	74.7	72.2	71.3	71.0	74.4	66.8	66.2
28	55.0	56.5	61.2	66.1	63.6	67.4	68.6	69.9	72.2	70.6	61.0
29	55.0	56.2	60.9	62.4	67.9	68.3	68.1	69.3	70.9	65.6	65.0
30	55.0	55.1	61.6	55.6	64.7	66.9	68.1	68.4	69.8	67.0	59.8
31	55.0	55.0	59.7	58.6	62.1	66.0	66.1	66.5	68.6	64.9	61.0
32	55.0	55.0	56.7	57.1	62.9	67.9	69.3	69.5	70.5	64.0	59.9
33	55.0	55.0	55.5	59.1	61.8	66.0	65.8	65.9	66.1	61.4	57.3
34	55.0	55.0	55.0	55.4	58.3	63.8	63.5	63.7	63.4	58.5	55.6
35	55.0	55.0	55.0	55.0	57.5	63.0	62.5	62.6	62.9	56.8	55.0
36	55.0	55.0	55.0	55.0	55.5	59.6	60.4	60.8	61.0	55.3	55.0
37	55.0	55.0	55.0	55.0	55.0	58.0	59.0	59.4	58.5	55.0	55.0
38	55.0	55.0	55.0	55.0	55.0	55.0	55.8	56.1	55.7	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	67.0	73.6	74.2	73.0	78.5	79.9	80.1	80.4	80.4	76.7	71.5
D	79.3	84.8	83.6	83.2	86.5	87.8	87.7	87.6	86.0	81.8	77.5
OASPL	89.6	94.9	93.5	94.2	94.7	94.6	95.2	95.5	92.5	88.8	84.6
PNL	86.3	91.6	91.3	91.5	94.2	95.0	95.1	95.2	93.8	89.6	85.3
PNLT	86.3	91.6	91.3	91.5	95.5	95.0	96.2	96.3	94.9	91.1	86.9

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 24, 141 KT. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-14.5	-12.0	-9.5	-7.0	-5.5	-4.5	-2.0	0	.5	3.0
17	91.0	92.5	95.0	97.2	96.4	94.9	90.4	87.4	89.4	85.1
18	82.3	90.3	93.9	97.8	99.3	99.6	93.2	91.2	91.5	79.8
19	86.6	84.8	88.9	90.4	95.1	93.1	92.6	92.0	91.7	79.4
20	87.7	92.7	97.4	99.4	95.4	92.4	90.2	90.6	88.4	74.7
21	82.3	85.6	89.0	92.6	95.0	93.4	87.8	80.0	76.4	68.6
22	79.4	87.4	91.0	95.0	89.6	88.2	81.0	83.1	83.4	78.0
23	76.6	80.0	88.0	89.4	87.6	85.2	76.1	86.3	87.3	80.5
24	77.9	72.0	81.9	84.5	80.5	77.0	78.7	87.8	87.7	80.4
25	77.9	71.7	81.5	84.3	78.8	72.9	82.2	83.2	81.5	77.4
26	73.5	68.9	78.6	82.1	76.5	78.3	85.2	74.5	74.1	72.7
27	69.6	70.5	77.3	84.0	81.0	83.9	81.4	75.6	74.8	76.4
28	68.8	69.5	76.8	79.7	83.9	84.9	74.3	70.5	71.2	71.8
29	67.7	64.2	74.5	72.6	77.5	77.6	80.5	71.7	71.8	75.0
30	68.0	66.8	75.7	71.7	79.0	78.7	75.6	72.1	72.1	72.7
31	65.3	65.0	75.1	73.2	76.0	75.3	74.2	69.4	69.3	70.2
32	62.4	63.5	72.9	71.6	73.6	72.8	70.5	66.2	70.3	70.7
33	58.3	61.8	70.9	68.9	71.2	70.2	67.4	68.3	67.8	68.2
34	56.2	59.4	66.5	65.3	68.0	66.9	64.5	66.1	66.0	65.0
35	55.0	58.6	65.4	60.9	62.9	63.9	63.6	65.4	65.0	63.8
36	55.0	55.7	62.3	58.9	60.8	59.2	61.7	63.5	63.3	61.9
37	55.0	55.0	55.1	55.0	56.6	57.1	57.8	61.4	61.2	58.6
38	55.0	55.0	55.0	55.0	55.0	55.0	55.2	57.2	56.6	55.8
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	78.6	80.9	87.3	89.6	88.2	87.8	87.4	85.1	85.2	82.5
D	87.0	89.7	95.4	97.6	96.1	95.6	93.3	92.7	92.6	87.7
OASPL	95.1	97.7	101.9	104.5	103.8	104.0	101.5	98.7	98.2	91.3
PNL	95.1	97.8	103.4	105.0	103.8	103.5	100.6	100.2	100.0	95.1
PNLT	95.1	97.8	103.4	105.0	105.4	104.9	102.5	100.2	100.0	95.1

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 25, 141 KT. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-11.0	-9.5	-8.0	-6.5	-5.5	-5.0	-3.5	-2.0	-.5	0	1.5
17	92.6	95.8	96.7	97.5	97.8	97.5	93.2	90.8	84.5	86.1	88.4
18	88.4	92.9	95.9	99.3	100.9	100.7	97.5	93.6	87.3	89.4	87.3
19	85.6	90.0	92.8	93.4	96.8	97.6	97.7	93.5	88.8	90.0	87.9
20	89.6	97.6	101.3	100.8	97.5	95.4	94.4	92.1	88.9	89.0	79.4
21	82.9	90.6	94.1	96.5	98.0	97.5	89.0	88.5	83.3	79.8	73.1
22	81.8	89.8	96.6	96.4	92.2	90.8	86.6	80.0	81.1	82.2	82.2
23	80.8	84.3	93.9	91.1	91.8	91.3	79.9	75.2	84.2	85.7	85.4
24	76.0	78.2	88.5	85.9	84.2	82.6	69.5	77.4	85.3	87.2	84.4
25	73.7	79.9	88.0	83.3	79.6	77.9	73.0	81.2	82.5	82.4	76.1
26	74.1	79.8	86.1	79.9	78.2	79.1	81.1	85.8	77.6	74.6	76.8
27	76.4	79.7	87.5	81.1	84.5	85.8	83.7	81.2	75.0	75.7	75.0
28	73.3	76.9	83.2	78.8	87.1	88.4	80.3	74.6	72.9	71.0	72.8
29	72.5	71.1	82.0	75.2	83.2	83.3	76.2	80.0	71.9	73.0	72.2
30	71.9	70.5	80.7	76.1	80.2	80.7	77.9	75.6	72.0	72.7	71.0
31	70.1	73.5	78.3	75.1	80.8	81.8	70.9	74.8	69.6	69.9	69.7
32	72.6	72.0	76.9	70.7	77.8	77.6	70.9	72.1	69.6	70.2	70.8
33	70.4	67.7	76.3	69.8	76.5	76.6	67.6	70.2	69.3	69.7	68.1
34	62.2	63.5	71.7	67.3	75.7	75.3	64.4	66.9	66.0	66.6	65.6
35	58.1	60.0	68.2	66.5	70.5	70.6	60.7	64.0	65.8	66.2	64.8
36	56.1	55.7	61.1	60.3	66.5	66.3	57.5	64.0	63.9	64.2	62.7
37	55.0	55.0	58.2	57.1	61.1	60.7	55.3	57.7	60.9	61.9	61.0
38	55.0	55.0	55.3	55.0	62.0	61.4	55.0	55.6	57.7	58.1	57.2
39	55.0	55.0	55.0	55.0	56.7	56.5	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	82.1	85.6	93.7	90.3	92.9	92.8	86.6	86.8	84.1	84.6	83.6
D	89.5	94.5	100.6	99.1	99.4	99.2	94.6	93.0	91.3	92.0	89.8
OASPL	96.4	101.9	105.9	105.9	105.8	105.6	102.9	101.6	98.6	98.2	95.7
PNL	97.7	102.7	107.8	106.3	107.1	106.8	102.1	101.1	99.0	99.8	97.9
PNLT	97.7	102.7	107.8	106.3	108.4	108.3	103.6	102.8	99.0	99.8	97.9

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 26, 141 KT. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-13.5	-11.5	-9.5	-8.0	-7.5	-5.5	-3.5	-1.5	0	.5	2.0
17	93.6	97.0	98.0	98.0	97.4	96.2	94.0	88.8	87.0	88.7	87.6
18	77.0	91.8	96.5	98.2	98.8	99.5	98.0	88.6	90.5	90.8	82.8
19	88.5	94.5	89.4	89.6	92.9	98.1	98.6	87.5	91.2	90.8	82.5
20	85.9	98.3	99.4	98.8	99.0	93.0	96.5	87.5	88.4	85.8	74.7
21	81.1	93.3	91.6	94.7	96.2	95.3	87.6	84.9	78.0	76.0	73.1
22	77.0	91.4	93.3	96.0	95.1	91.2	86.0	79.2	83.5	84.0	80.2
23	74.0	90.1	91.9	91.4	91.5	87.9	79.1	81.6	86.2	86.1	83.5
24	72.9	83.7	86.5	88.0	88.9	82.0	71.9	81.6	86.5	85.9	81.0
25	70.7	79.3	85.0	83.8	83.5	73.8	77.4	79.4	79.7	77.4	74.4
26	69.2	77.3	81.0	78.7	77.0	71.1	84.4	80.3	75.6	77.0	77.2
27	69.3	76.0	81.3	78.0	76.4	79.0	84.9	74.6	74.6	73.9	75.3
28	68.9	73.6	79.6	77.2	77.1	83.4	79.0	74.0	71.3	72.2	75.1
29	68.3	72.4	78.4	75.4	77.8	80.4	78.4	72.9	72.3	72.5	74.2
30	68.5	72.4	79.7	77.9	77.6	70.8	78.1	72.3	71.9	71.6	72.1
31	68.3	71.2	76.1	80.6	79.7	72.0	75.0	70.4	69.7	69.8	70.7
32	66.4	68.0	75.3	76.1	75.8	69.8	73.0	69.0	69.5	69.8	70.4
33	65.0	65.3	71.2	72.0	71.9	67.8	71.8	69.1	68.7	68.6	68.7
34	65.0	65.0	68.8	71.0	70.4	65.4	67.4	66.7	67.2	67.1	65.8
35	65.0	65.0	65.6	67.6	67.5	65.0	65.8	65.7	66.3	66.1	65.1
36	65.0	65.0	65.7	65.0	65.0	65.0	65.0	65.2	65.2	65.2	65.0
37	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
38	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
39	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
40	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	77.5	87.0	89.3	91.2	91.0	88.3	88.6	84.2	84.6	84.2	82.8
D	87.1	95.7	96.6	98.2	98.2	95.5	95.3	90.9	92.3	91.8	88.8
OASPL	96.2	103.0	103.8	104.5	104.7	103.9	103.7	99.4	97.9	97.5	93.6
PNL	96.7	104.1	106.1	106.1	106.3	104.0	104.0	98.7	100.0	99.7	97.3
PNLT	96.7	104.1	106.1	107.3	106.3	105.4	104.0	98.7	100.0	99.7	97.3

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 27, 141 KT. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-14.5	-12.5	-10.5	-8.5	-6.5	-5.0	-4.5	-2.5	-.5	0	1.5
17	84.9	94.4	94.8	94.8	98.7	96.4	96.0	93.8	87.8	89.3	88.1
18	78.2	84.0	89.2	92.5	100.1	100.7	100.0	93.2	91.1	91.9	84.9
19	85.1	87.3	87.3	83.6	96.4	101.0	100.7	93.1	92.0	92.2	84.5
20	87.8	92.9	98.0	93.8	97.8	97.9	98.5	92.6	90.1	88.5	76.6
21	85.8	92.0	89.4	85.5	97.3	95.4	91.3	90.8	79.6	77.0	74.3
22	84.6	90.0	90.1	88.0	93.5	94.7	93.4	85.8	82.6	83.1	81.6
23	81.5	90.7	85.5	84.7	94.4	90.1	86.7	80.0	87.1	87.1	84.5
24	75.8	83.7	80.7	83.4	89.6	86.1	82.5	80.8	88.5	88.1	82.8
25	73.0	78.9	82.4	81.8	83.6	75.9	73.7	84.2	83.1	80.8	77.0
26	71.3	75.9	81.4	78.8	78.4	80.7	85.7	89.7	75.5	75.2	76.4
27	69.7	76.1	82.8	77.8	78.2	88.1	90.5	87.6	77.1	76.7	76.1
28	67.4	73.0	77.8	75.1	80.8	88.9	89.6	78.1	72.0	72.6	74.2
29	66.9	70.5	73.4	72.0	83.7	83.4	82.4	81.3	73.5	73.1	74.6
30	66.3	70.0	69.2	72.9	80.8	78.5	82.0	80.3	72.9	72.6	73.0
31	65.4	67.6	68.9	69.6	80.0	79.6	79.0	77.4	71.0	70.8	71.4
32	65.0	65.6	68.1	72.5	78.9	78.6	80.0	76.1	70.8	70.6	71.3
33	65.0	65.0	66.4	68.3	74.8	76.0	76.9	75.0	70.4	70.0	70.0
34	65.0	65.0	65.0	66.2	73.1	71.7	71.8	69.9	67.9	67.8	67.7
35	65.0	65.0	65.0	65.1	70.8	69.1	69.4	68.0	67.2	66.9	66.2
36	65.0	65.0	65.0	65.0	65.9	67.0	67.4	66.2	65.7	65.4	65.3
37	65.0	65.0	65.0	65.0	65.0	65.4	66.0	65.0	65.0	65.0	65.0
38	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
39	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
40	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	79.2	85.3	86.9	84.9	91.5	93.0	93.5	91.8	86.0	85.5	83.5
D	88.7	93.6	94.0	91.5	96.8	99.5	99.2	97.1	90.5	93.1	90.1
OASPL	94.2	99.9	101.0	99.3	105.7	106.4	106.2	103.0	98.8	98.3	94.0
PNL	96.7	101.7	103.6	101.7	107.1	107.4	107.3	104.7	101.4	101.1	98.3
PNLT	96.7	101.7	103.6	102.8	107.1	108.5	108.3	104.7	101.4	101.1	98.3

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0



# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 28, 150 KT. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-8.0	-7.0	-6.0	-5.0	-4.0	-3.0	-2.0	-1.0	0	.5
17	98.2	99.5	99.7	100.4	98.9	96.5	95.8	93.5	92.0	92.2
18	95.8	99.3	102.0	103.9	102.9	99.8	96.5	95.5	94.5	94.0
19	84.4	94.3	99.7	102.1	102.4	100.8	95.7	94.7	95.2	93.9
20	96.8	99.5	97.4	97.9	98.3	99.9	96.2	93.0	92.9	90.5
21	87.8	95.6	99.6	102.9	99.7	93.8	92.8	89.4	85.3	78.7
22	86.3	93.8	96.2	98.6	96.8	93.6	88.2	80.7	78.0	79.3
23	82.9	88.6	97.1	99.4	94.5	87.8	82.5	79.7	84.4	84.9
24	78.7	84.6	93.5	93.8	89.2	83.2	78.2	84.2	86.3	85.5
25	75.5	80.3	89.7	90.0	82.0	74.7	82.7	86.3	84.8	82.7
26	73.0	77.0	86.4	85.4	77.2	83.3	89.4	37.0	77.2	74.0
27	74.4	76.9	85.8	85.4	84.4	86.7	88.7	82.1	76.8	77.2
28	74.0	77.6	83.5	85.2	87.2	85.5	80.2	76.1	73.6	72.7
29	71.5	77.9	81.9	86.2	85.1	81.4	80.9	75.6	74.2	74.8
30	68.9	74.0	77.2	84.2	78.0	80.1	79.3	75.1	73.2	73.3
31	67.9	72.0	74.8	78.9	77.5	77.8	75.9	72.5	72.2	72.2
32	68.4	70.3	74.2	76.7	76.5	75.9	74.4	72.3	72.2	72.1
33	65.8	70.0	72.6	76.7	75.2	75.2	72.8	70.5	71.1	71.2
34	65.0	67.9	69.5	73.3	68.8	69.0	68.2	68.6	69.5	69.5
35	65.0	66.3	66.1	70.0	66.8	66.9	66.9	67.8	68.2	68.1
36	65.0	65.0	65.0	67.5	65.0	65.0	65.2	66.8	67.0	66.8
37	65.0	65.0	65.0	67.1	65.0	65.0	65.0	65.0	65.3	65.2
38	65.0	65.0	65.0	65.5	65.0	65.0	65.0	65.0	65.0	65.0
39	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
40	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	83.6	88.4	93.2	95.5	92.9	91.3	90.4	88.0	86.1	85.3
D	92.9	97.4	101.5	103.4	100.9	98.3	96.5	94.9	94.5	93.6
OASPL	101.6	105.2	107.7	109.7	108.2	106.2	104.4	103.3	101.4	100.1
PNL	102.2	105.7	108.8	111.0	108.4	107.1	105.0	103.0	102.1	101.2
PNLT	102.2	105.7	108.8	111.0	108.4	107.1	105.0	103.0	102.1	101.2

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 29, 150 KT. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-8.5	-7.5	-6.5	-5.5	-4.5	-3.5	-2.5	-1.5	0	.5
17	95.3	99.2	99.9	98.1	97.7	96.3	96.2	94.3	90.3	91.4
18	92.1	98.0	99.6	100.2	102.6	100.3	97.5	94.5	93.1	93.1
19	83.9	89.7	91.8	99.2	103.8	102.8	99.2	92.3	93.5	93.0
20	89.4	98.2	97.5	96.2	101.1	103.2	100.8	92.5	91.5	89.2
21	86.6	94.4	95.1	99.4	99.7	95.2	95.2	90.3	83.9	77.3
22	81.6	89.2	93.7	97.3	100.7	96.9	89.6	85.8	77.6	80.2
23	80.2	87.5	93.9	96.6	96.3	93.1	88.3	78.8	84.0	85.0
24	80.5	85.2	90.0	93.2	95.1	88.6	78.5	78.3	86.2	85.9
25	78.3	83.8	85.1	89.0	89.2	88.5	76.9	83.7	85.0	81.9
26	72.0	78.4	80.7	84.2	82.7	82.5	86.9	88.4	78.8	73.4
27	74.0	79.0	78.6	81.3	84.8	90.9	92.1	85.6	76.6	77.2
28	72.5	78.5	76.5	82.0	88.3	90.3	88.1	78.1	73.7	72.8
29	71.6	78.2	76.0	83.2	89.3	85.8	79.4	79.5	73.8	74.4
30	72.1	78.1	76.8	81.7	86.6	79.4	81.5	77.1	73.1	73.4
31	70.8	76.8	76.0	77.9	80.2	81.1	80.6	74.7	71.9	71.8
32	69.6	75.6	76.8	75.2	78.7	77.2	76.6	72.7	71.8	71.7
33	66.8	73.0	75.5	72.8	78.2	74.2	74.3	71.8	70.9	70.9
34	65.6	67.0	69.7	71.4	74.9	71.0	70.9	69.5	69.5	69.5
35	65.0	65.6	67.7	68.4	72.6	67.9	67.9	67.4	68.0	68.5
36	65.0	65.0	66.6	65.6	68.0	66.6	67.0	67.3	66.8	66.7
37	65.0	65.0	65.0	65.0	65.2	65.1	65.1	65.0	65.0	65.0
38	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
39	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
40	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	82.1	88.5	90.2	94.1	96.1	95.0	93.7	89.2	86.0	85.4
D	91.0	96.9	98.4	101.7	103.2	101.9	99.9	95.1	93.7	93.1
OASPL	98.2	103.7	104.9	107.3	109.7	108.4	106.5	103.2	100.5	99.7
PNL	99.3	105.2	106.2	108.5	110.9	109.7	107.7	103.7	101.2	100.7
PNLT	99.3	105.2	106.2	108.5	110.9	109.7	108.7	103.7	101.2	100.7

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 12, 6 DEGREE APPROACH, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-52.5	-44.0	-35.5	-27.0	-18.5	-10.0	-5.5	-1.5	0	7.0	9.0
17	74.2	68.3	71.4	80.2	79.4	88.7	90.1	88.7	86.6	82.1	79.0
18	82.2	80.5	81.1	86.0	80.9	89.3	88.7	87.8	87.5	82.5	82.3
19	77.9	77.0	79.0	80.8	85.7	87.2	83.8	85.5	81.0	80.1	77.7
20	84.7	79.2	81.6	78.2	82.2	83.6	83.5	81.7	76.3	83.2	77.6
21	83.5	77.8	77.4	70.3	82.6	85.1	81.9	72.6	71.9	79.6	76.3
22	79.3	78.0	76.3	73.0	76.5	79.4	70.2	81.0	80.0	76.3	73.5
23	73.1	80.0	72.0	72.3	74.0	73.6	79.7	81.9	81.7	68.3	68.7
24	69.0	79.3	67.8	68.0	71.3	75.4	86.4	84.9	83.3	73.5	62.1
25	67.5	78.2	72.3	69.3	68.8	81.1	85.9	82.1	77.5	78.0	68.0
26	66.1	71.6	73.0	65.2	63.6	81.9	84.7	75.6	76.3	80.6	71.5
27	63.1	67.7	70.0	64.2	68.4	82.9	77.4	80.2	80.9	75.9	71.3
28	62.8	61.9	73.1	61.2	73.1	76.6	81.0	74.8	75.3	68.8	67.4
29	62.5	61.5	70.8	61.3	70.6	78.9	75.6	76.5	75.8	74.1	61.2
30	56.4	59.1	68.3	56.8	64.4	78.0	74.7	72.3	72.9	68.2	64.1
31	55.2	56.1	62.4	55.1	66.3	75.7	72.7	70.1	69.6	66.9	60.9
32	55.0	55.0	59.8	55.2	67.9	73.4	71.9	69.4	68.0	66.0	64.4
33	55.0	55.0	56.2	55.0	63.9	70.1	69.0	64.8	64.8	62.5	57.6
34	55.0	55.0	55.0	55.0	61.9	64.4	64.3	63.1	62.4	61.0	55.7
35	55.0	55.0	55.0	55.0	57.8	61.4	61.5	60.6	60.9	59.9	55.0
36	55.0	55.0	55.0	55.0	55.0	57.1	58.5	59.1	59.5	57.2	55.0
37	55.0	55.0	55.0	55.0	55.0	55.0	55.9	55.7	57.1	55.0	55.0
38	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	73.3	76.9	78.1	71.1	78.2	86.1	86.4	84.3	83.5	81.0	74.5
D	82.5	83.9	82.5	79.7	83.9	90.6	91.8	89.9	88.9	86.1	80.5
OASPL	88.7	88.2	87.5	89.4	90.1	95.2	98.5	96.2	95.9	89.4	86.8
PNL	90.9	91.4	90.9	89.2	92.7	99.1	99.6	97.9	96.7	94.9	89.0
PNLT	90.9	91.4	90.9	89.2	93.9	99.1	101.1	97.9	96.7	96.7	90.7

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 22, 100 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-22.5	-18.5	-14.5	-10.5	-6.5	-2.5	0	1.5	5.5
17	76.0	80.2	85.0	88.0	81.2	84.4	86.3	87.3	75.9
18	82.5	85.4	86.7	91.4	86.3	86.8	83.2	80.4	80.3
19	83.3	89.5	90.6	85.2	87.9	88.2	72.5	75.5	78.3
20	78.3	83.6	87.4	88.1	85.7	81.6	72.7	70.0	71.5
21	79.8	87.2	86.5	86.7	81.3	74.8	67.5	65.0	67.9
22	76.0	82.9	81.3	80.3	77.1	66.0	72.9	74.6	61.0
23	74.1	77.3	75.2	73.7	72.9	75.4	77.5	75.9	68.4
24	68.0	74.1	71.5	72.6	66.8	83.2	77.2	76.2	73.7
25	66.9	74.8	71.9	74.1	73.0	82.7	69.6	70.2	75.6
26	65.1	78.0	72.5	70.8	79.5	78.2	64.9	68.0	73.3
27	59.1	73.5	65.4	64.2	79.3	70.8	70.2	71.5	65.4
28	62.0	67.9	66.0	68.9	76.6	76.0	63.6	66.5	70.2
29	58.0	61.2	70.5	75.2	66.5	72.0	67.0	68.6	69.3
30	56.9	55.7	67.8	72.3	72.9	73.2	64.4	68.1	70.7
31	55.2	56.1	64.7	66.4	68.7	73.9	63.7	65.8	68.2
32	55.0	55.4	62.3	62.2	69.4	72.3	66.9	67.8	67.6
33	55.0	55.0	59.3	62.6	65.6	69.7	61.6	64.1	64.5
34	55.0	55.0	55.8	56.0	63.7	66.9	61.4	62.1	60.8
35	55.0	55.0	55.0	55.0	59.4	64.5	59.2	59.9	57.9
36	55.0	55.0	55.0	55.0	55.7	60.1	57.8	58.5	56.3
37	55.0	55.0	55.0	55.0	55.0	58.0	55.0	55.7	55.0
38	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	72.1	79.2	78.5	80.2	82.0	83.0	76.7	77.9	78.4
D	81.9	87.5	86.8	87.4	87.6	88.8	83.8	83.7	82.7
OASPL	90.1	95.0	95.3	95.8	94.4	94.2	94.2	91.2	87.5
PNL	89.1	94.7	95.2	95.5	95.5	97.2	91.2	91.4	90.7
PNLT	90.2	94.7	95.2	96.9	97.3	98.7	92.3	91.4	90.7

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 23, 100 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-17.0	-13.5	-10.0	-6.5	-3.0	0	.5	4.0	7.5	9.0
17	76.6	86.1	86.4	80.7	84.8	85.6	86.8	83.4	70.3	70.8
18	79.2	87.5	89.1	87.5	85.1	85.9	80.3	82.4	76.4	70.1
19	82.8	90.9	82.3	88.8	88.3	75.3	74.5	76.4	76.9	73.3
20	72.8	89.3	85.9	85.4	83.2	76.2	75.2	74.0	72.9	68.4
21	71.8	87.9	83.9	80.6	76.0	69.5	67.6	67.6	69.3	67.7
22	61.0	83.5	77.6	75.5	69.0	71.1	71.9	66.5	64.3	62.7
23	61.9	79.9	70.7	70.4	65.9	76.8	76.1	72.6	59.6	57.1
24	61.7	76.2	69.9	69.5	73.8	77.2	75.5	76.2	65.4	56.1
25	56.8	75.3	69.4	59.3	74.9	72.0	71.2	75.9	69.7	63.0
26	55.1	75.7	69.1	68.2	75.0	66.0	66.6	69.2	71.6	67.5
27	55.0	70.8	58.6	70.5	68.8	70.1	70.9	59.1	67.8	66.5
28	55.0	65.4	65.4	68.6	67.3	65.7	65.2	68.9	61.1	59.2
29	55.0	62.5	67.9	62.9	67.0	67.8	68.3	72.0	68.7	63.3
30	55.0	55.9	62.2	58.0	63.9	65.3	66.0	69.2	61.9	62.0
31	55.0	56.2	58.1	62.1	63.0	64.6	64.6	68.0	62.8	61.6
32	55.0	56.3	56.7	59.2	64.0	67.2	66.7	67.9	62.8	61.4
33	55.0	55.0	56.3	61.4	64.7	64.9	64.9	64.7	58.5	56.4
34	55.0	55.0	55.2	56.1	60.5	63.8	63.8	61.5	57.5	55.6
35	55.0	55.0	55.0	55.0	58.2	60.1	60.4	59.7	56.0	55.0
36	55.0	55.0	55.0	55.0	56.5	58.2	58.5	57.6	55.1	55.0
37	55.0	55.0	55.0	55.0	55.0	55.5	55.5	55.0	55.0	55.0
38	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	64.9	79.5	75.6	75.3	77.7	77.6	77.1	79.1	74.2	71.9
D	77.4	88.7	83.8	84.9	85.4	84.6	84.0	84.4	79.3	76.7
OASPL	88.9	96.7	93.6	93.5	93.7	95.0	94.4	92.7	84.4	82.6
PNL	86.0	95.7	92.7	92.9	93.5	91.9	91.1	91.6	87.7	84.7
PNLT	86.0	95.7	94.3	94.2	93.5	91.9	91.1	92.6	90.1	84.7

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 24, 141 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-16.0	-13.5	-11.0	-8.5	-6.0	-3.5	-1.0	0	1.5	3.0
17	83.1	90.5	93.9	95.7	95.0	89.4	89.0	88.3	87.0	81.5
18	85.7	89.8	90.8	93.8	99.3	93.8	91.0	90.0	85.7	83.0
19	82.6	90.4	97.4	93.9	96.1	95.9	85.0	83.0	76.7	75.8
20	86.6	89.1	95.2	97.0	95.8	95.5	79.4	79.7	72.2	72.9
21	84.9	88.4	94.0	95.3	97.1	90.1	77.8	74.9	68.7	67.7
22	82.5	88.1	92.9	92.6	92.2	82.9	69.3	72.6	78.2	73.8
23	82.2	89.9	91.7	92.0	88.4	78.5	73.1	79.5	80.4	75.9
24	79.5	85.7	88.3	88.5	84.8	70.0	76.6	81.8	80.8	77.0
25	76.2	83.0	85.6	85.9	80.5	69.9	77.3	75.6	74.8	75.7
26	76.4	82.2	84.2	85.1	75.9	78.3	79.0	73.3	72.6	70.9
27	73.7	78.2	80.9	82.8	73.3	79.4	71.9	73.2	75.0	74.4
28	73.3	75.5	72.7	78.2	73.3	75.1	74.7	73.4	70.3	69.8
29	69.4	74.8	66.2	74.6	72.7	67.9	70.3	70.9	71.4	74.3
30	67.5	73.1	66.1	72.4	68.8	69.0	69.8	69.7	70.4	71.9
31	62.3	69.4	65.7	69.4	64.5	63.2	69.0	70.1	68.9	69.6
32	59.1	65.6	61.8	65.4	62.1	64.7	69.0	69.7	69.8	70.4
33	56.6	66.8	57.3	63.0	59.5	64.5	69.2	69.3	67.7	66.7
34	55.0	61.5	55.0	56.6	55.5	60.8	66.4	67.5	68.4	65.4
35	55.0	55.4	55.0	55.0	55.0	59.5	65.3	65.2	65.1	61.8
36	55.0	55.0	55.0	55.0	55.0	55.6	62.3	62.8	63.4	60.0
37	55.0	55.0	55.0	55.0	55.0	55.2	61.1	61.0	59.3	56.3
38	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.1	55.1	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	80.0	85.4	88.3	89.9	87.1	83.2	81.8	81.6	81.3	80.8
D	87.0	92.5	96.4	97.5	96.3	92.4	88.7	88.4	87.4	85.5
OASPL	93.4	98.6	103.0	103.5	103.7	101.4	99.2	98.5	95.3	93.7
PNL	95.0	100.9	102.6	103.8	103.1	100.3	96.2	95.2	95.2	93.3
PNLT	95.0	101.9	102.6	103.8	103.1	101.4	97.4	96.2	95.2	94.5

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 25, 141 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-13.0	-11.5	-10.0	-8.5	-7.0	-6.5	-5.5	-4.0	-2.5	0	-0.5
17	88.8	94.2	96.4	96.7	97.1	97.2	96.4	91.1	92.3	86.5	88.2
18	83.0	87.2	85.3	92.5	98.2	98.9	100.3	97.2	96.3	87.7	89.6
19	87.5	94.5	96.3	97.6	91.2	92.3	96.9	99.2	93.1	82.8	84.1
20	83.0	89.9	94.0	99.2	99.2	99.1	97.0	96.5	89.3	77.6	78.8
21	84.8	87.8	95.9	98.4	94.9	95.0	97.2	92.8	86.2	73.2	75.5
22	85.0	85.6	93.8	94.6	95.0	94.9	91.9	88.2	78.9	71.2	69.8
23	85.5	83.6	92.2	93.0	90.1	89.0	88.2	81.9	70.3	77.9	76.6
24	78.5	80.2	89.3	89.6	86.9	85.1	82.2	74.1	69.6	79.2	78.9
25	76.1	77.9	87.8	87.7	83.9	81.0	74.7	69.4	75.0	76.0	77.4
26	73.9	79.5	87.6	85.8	81.4	78.2	71.7	78.0	82.0	72.3	75.8
27	71.1	77.9	85.2	82.7	78.4	74.5	75.4	79.1	78.8	72.7	71.6
28	70.1	76.1	83.6	79.6	73.1	73.5	78.0	77.3	70.0	70.8	72.2
29	68.7	74.9	80.8	75.7	74.3	74.9	76.4	70.3	72.1	71.5	70.3
30	66.7	73.5	78.3	69.1	73.4	72.8	71.0	67.5	68.1	69.4	69.5
31	63.6	71.4	73.7	67.1	72.2	68.3	65.6	66.1	66.3	68.9	68.4
32	60.8	68.3	72.1	65.5	64.4	61.3	63.4	64.0	65.4	69.2	68.2
33	60.3	65.7	68.2	64.3	64.7	64.1	59.5	63.9	66.7	69.3	69.1
34	58.7	58.8	60.9	57.1	58.7	56.6	55.0	59.8	63.0	67.6	66.1
35	55.9	57.1	57.7	55.0	55.7	55.5	55.0	57.0	60.7	65.4	65.3
36	55.0	55.0	55.7	55.0	55.0	55.0	55.0	55.1	58.6	62.3	61.8
37	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	58.0	59.9	61.0
38	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.4	55.0
39	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
A	80.6	82.2	91.2	91.0	88.7	88.0	67.1	84.9	82.6	80.8	80.9
D	88.5	91.2	97.7	99.3	97.3	97.2	96.5	94.6	90.7	87.7	87.9
OASPL	95.0	99.8	103.6	105.4	104.4	104.6	104.5	103.0	101.4	98.8	98.8
PNL	96.3	99.8	104.8	105.4	104.5	104.1	103.3	101.9	98.9	94.9	95.5
PNLT	96.3	99.8	104.8	105.4	105.5	105.8	103.3	101.9	99.9	94.9	95.5

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 26, 141 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-12.5	-11.0	-9.5	-8.0	-6.5	-5.0	-3.5	-2.0	-1.0	0	-1.0
17	90.5	96.8	97.7	99.5	97.5	96.9	91.3	93.7	90.4	87.8	90.4
18	82.2	92.6	90.6	93.3	94.8	98.9	94.4	97.5	93.3	89.1	93.3
19	90.5	99.3	100.2	99.5	94.5	97.3	97.0	93.9	87.6	82.8	87.6
20	90.4	97.5	99.1	99.1	99.2	96.7	97.4	86.9	80.1	77.3	80.1
21	88.2	96.3	99.1	99.6	95.1	95.7	91.6	80.7	75.3	72.4	75.3
22	84.8	95.6	97.1	94.7	93.3	90.7	83.6	74.2	70.8	74.3	70.8
23	83.4	94.8	95.2	93.0	91.1	85.5	78.0	70.9	75.3	79.0	75.3
24	79.5	91.1	91.6	89.4	86.8	78.8	70.3	74.9	79.6	80.4	79.6
25	75.9	87.2	90.0	85.6	81.7	72.9	74.9	77.8	78.0	75.3	78.0
26	74.5	87.3	90.2	83.1	76.6	79.2	81.3	82.3	78.3	72.2	78.3
27	71.2	85.4	88.4	77.4	76.2	82.2	80.5	76.4	73.4	75.0	73.4
28	67.2	83.5	84.8	76.1	79.0	80.7	74.7	72.9	74.0	71.4	74.0
29	65.2	80.0	82.0	79.9	78.7	73.2	70.2	72.7	71.8	72.4	71.8
30	65.0	77.6	76.5	80.2	74.0	68.4	69.8	70.5	71.6	71.1	71.6
31	65.0	75.6	74.0	75.7	71.7	69.0	67.3	69.3	71.1	70.7	71.1
32	65.0	74.9	70.8	71.1	69.5	65.2	67.8	69.0	70.6	70.9	70.6
33	65.0	70.6	66.8	68.9	65.2	65.0	66.2	69.6	70.0	69.7	70.0
34	65.0	68.2	65.8	65.8	65.2	65.0	65.3	67.4	68.1	68.0	68.1
35	65.0	65.4	65.0	65.0	65.0	65.0	65.0	66.1	66.7	66.6	66.7
36	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.1	65.1	65.2	65.1
37	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
38	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
39	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
40	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	80.6	91.7	92.4	90.1	88.4	86.8	84.7	83.3	82.8	81.6	82.8
D	89.9	98.8	99.9	98.6	96.2	95.0	93.7	91.5	89.7	88.5	89.7
OASPL	97.2	105.1	106.4	106.1	103.9	103.3	102.5	101.9	100.7	99.7	100.7
PNL	98.7	107.0	108.0	107.1	105.3	103.8	102.8	100.5	98.4	96.6	98.4
PNLT	98.7	107.0	108.0	107.1	105.3	103.8	102.8	100.5	98.4	96.6	98.4

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0



# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 27, 141 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-11.5	-10.5	-9.5	-8.5	-7.5	-6.5	-5.5	-4.5	-1.5	0	-1.5
17	91.9	96.1	98.4	99.7	100.3	99.6	97.6	94.0	92.7	87.4	92.7
18	81.4	84.2	87.5	91.6	96.8	99.3	101.4	99.4	96.0	88.9	96.0
19	91.6	96.7	99.2	100.7	98.2	96.1	100.6	101.3	91.8	83.8	91.8
20	89.0	94.2	97.8	100.3	101.3	100.4	97.0	99.3	84.8	80.1	84.8
21	88.0	95.0	99.7	101.0	98.6	98.8	100.9	97.3	81.2	74.1	81.2
22	87.6	91.4	96.4	98.2	96.9	96.8	94.4	92.9	75.8	74.1	75.8
23	88.1	88.7	92.8	96.5	95.1	94.2	94.7	91.2	73.5	80.9	73.5
24	84.6	84.4	89.6	93.7	92.5	91.5	90.0	86.9	78.2	82.0	78.2
25	79.2	80.3	88.5	92.5	90.6	89.1	84.6	80.1	81.5	76.5	81.5
26	78.9	79.3	88.6	92.0	88.8	86.0	80.8	79.3	84.2	74.0	84.2
27	76.5	78.2	87.0	89.7	84.9	80.0	82.3	84.6	77.5	74.9	77.5
28	73.7	75.6	81.5	86.1	81.2	81.7	86.3	85.9	75.3	71.9	75.3
29	72.9	74.8	77.5	84.5	81.3	83.9	86.1	84.1	74.2	73.4	74.2
30	74.4	73.4	74.9	84.1	79.8	80.3	81.8	77.4	73.0	72.4	73.0
31	71.8	72.7	74.9	82.5	76.2	78.0	79.3	77.0	71.1	71.4	71.1
32	70.9	73.9	73.6	79.6	73.7	75.4	77.7	74.8	71.2	72.4	71.2
33	71.8	71.7	72.8	79.8	73.4	73.4	73.5	71.4	70.5	71.2	70.5
34	68.8	69.0	70.2	77.0	71.4	71.8	71.8	68.4	68.7	69.5	68.7
35	66.0	65.5	65.7	73.4	68.8	68.0	66.8	65.2	66.7	67.5	66.7
36	65.0	65.0	65.9	68.7	65.3	65.3	65.1	65.1	65.0	65.5	65.0
37	65.0	65.0	65.0	65.3	65.0	65.0	65.0	65.0	65.0	65.0	65.0
38	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
39	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
40	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	85.4	87.0	92.9	95.6	92.7	92.1	92.8	90.8	85.0	82.5	85.0
D	93.1	95.3	100.1	102.0	100.4	99.5	99.9	98.1	91.7	89.5	91.7
OASPL	97.9	102.2	106.0	107.9	107.0	106.4	106.6	105.8	102.1	100.3	102.1
PNL	101.1	103.7	107.7	110.6	108.8	108.2	108.8	106.9	100.5	97.7	100.5
PNLT	101.1	103.7	107.7	110.6	108.8	108.2	108.8	106.9	100.5	97.7	100.5

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 28, 150 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-9.0	-8.5	-8.0	-7.5	-7.0	-6.5	-6.0	-5.5	0	-2.5
17	98.4	99.6	100.3	101.0	101.9	102.5	102.3	101.6	92.3	97.2
18	89.5	91.3	93.6	96.1	98.2	99.2	100.0	101.4	91.0	99.4
19	98.7	100.1	100.6	100.9	100.5	99.8	97.8	98.4	84.8	97.7
20	96.1	98.2	100.6	103.0	104.3	104.9	104.9	104.0	82.1	95.8
21	94.6	97.4	99.5	101.2	101.9	101.8	101.1	101.2	78.3	94.1
22	91.7	93.6	95.8	97.6	99.0	99.9	100.6	99.7	74.8	89.2
23	89.0	91.2	94.1	97.2	99.0	99.8	99.1	97.5	79.7	83.7
24	86.1	87.7	90.6	94.2	96.3	97.1	96.4	94.4	82.3	75.6
25	84.2	84.7	88.2	91.9	94.2	94.8	93.6	90.6	80.0	75.6
26	84.3	84.2	88.0	92.2	94.0	94.1	92.0	88.3	79.1	85.3
27	81.2	80.3	87.0	91.0	92.6	92.2	90.0	86.0	75.5	86.2
28	78.0	78.7	84.2	88.5	89.3	88.8	86.6	85.2	74.8	84.0
29	78.1	80.2	83.6	87.4	87.5	87.7	86.1	86.2	74.4	76.0
30	77.7	78.8	82.4	85.2	85.5	86.2	85.4	85.1	73.3	75.9
31	76.3	77.7	80.0	82.8	84.2	86.0	84.9	83.4	72.6	74.8
32	73.2	76.7	79.7	83.2	83.0	83.6	81.3	81.3	72.9	72.1
33	70.2	74.1	77.5	80.8	81.0	80.8	78.9	78.5	72.2	70.2
34	67.2	70.9	73.1	76.9	77.2	77.4	75.5	75.8	70.8	67.1
35	65.0	68.5	70.6	76.9	76.8	78.1	75.4	75.2	69.1	65.7
36	65.0	65.3	69.1	71.5	71.9	71.9	70.5	69.6	67.4	65.0
37	65.0	65.1	66.1	67.7	67.9	67.8	66.8	66.3	65.7	65.0
38	65.0	65.0	65.0	70.0	70.0	69.7	65.4	65.3	65.0	65.0
39	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
40	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	88.1	89.7	92.8	97.8	99.0	99.5	97.6	96.3	84.1	88.8
D	96.2	98.0	100.4	104.1	105.4	105.8	104.6	103.5	90.9	96.2
OASPL	103.9	105.4	107.0	108.9	109.9	110.3	109.9	109.1	102.1	105.1
PNL	105.0	106.6	109.1	111.8	112.9	113.3	112.6	111.6	99.0	104.4
PNLT	105.0	106.6	109.1	112.4	113.5	114.5	112.6	111.6	99.0	104.4

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

# TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTOR.

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 29, 150 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-9.5	-8.5	-7.5	-6.5	-5.5	-4.5	-3.5	-2.5	-2.0	0	-2.0
17	94.8	99.1	101.7	102.8	102.3	100.1	95.7	97.1	96.7	90.8	96.7
18	81.1	91.2	96.4	99.1	101.9	103.2	99.6	99.1	99.2	90.3	99.2
19	91.1	98.0	99.3	97.4	95.3	101.7	101.7	97.5	96.8	84.7	96.8
20	92.0	98.1	103.1	105.1	104.3	101.3	101.7	97.2	91.8	83.0	91.8
21	92.7	98.2	101.4	100.8	99.9	101.3	98.9	95.4	86.7	78.3	86.7
22	89.4	95.5	98.9	99.9	100.1	97.8	95.1	89.8	82.2	74.2	82.2
23	84.8	94.7	99.0	99.2	96.7	95.3	91.7	84.6	77.1	79.4	77.1
24	81.0	92.4	96.6	96.1	94.0	91.8	87.5	76.7	72.8	82.4	72.6
25	76.7	90.6	94.6	94.3	92.5	88.2	79.2	75.5	80.0	80.2	80.0
26	74.9	89.9	94.3	93.7	90.8	85.8	83.8	84.2	86.3	79.8	86.3
27	73.7	88.6	92.6	91.7	88.0	83.4	89.0	84.9	84.0	75.4	84.0
28	72.6	85.3	90.0	88.8	85.2	84.8	88.9	81.9	77.0	74.9	77.0
29	73.4	83.4	87.6	86.3	82.6	87.0	85.6	73.2	75.2	74.8	75.2
30	71.8	84.1	85.3	82.9	81.3	86.2	82.7	74.1	71.1	73.9	71.1
31	70.3	82.0	82.1	82.6	81.3	82.4	80.6	70.7	69.6	73.9	69.6
32	68.5	82.0	81.7	79.1	77.3	77.9	78.3	70.2	69.9	73.3	69.9
33	66.5	80.4	80.1	76.7	74.3	77.5	75.6	68.8	69.9	72.3	69.9
34	65.4	79.0	79.3	76.0	71.7	73.0	72.5	67.0	68.0	70.3	68.0
35	65.0	79.1	78.8	71.4	69.8	70.2	67.4	65.2	67.5	69.2	67.5
36	65.0	75.2	74.8	70.1	69.8	69.3	65.0	65.0	65.7	67.2	65.7
37	65.0	72.9	72.4	65.8	66.0	66.9	65.0	65.0	65.2	65.5	65.2
38	65.0	71.8	71.3	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
39	65.0	66.3	66.1	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
40	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	83.7	95.0	93.7	97.5	95.6	94.9	93.6	87.6	86.5	84.5	86.5
D	92.6	102.0	105.4	104.6	103.2	101.8	100.1	95.8	94.2	91.3	94.2
OASPL	99.5	106.0	109.3	109.9	109.2	108.5	107.1	104.7	104.0	102.5	104.0
FNL	101.1	109.7	112.6	112.5	111.2	110.3	109.0	104.6	102.9	99.0	102.9
PNLT	101.1	109.7	112.6	112.5	111.2	110.3	109.0	104.6	102.9	99.0	102.9

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 24, 141 KT. FLY BY, CENTERLINE MIC. ( HARD SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-16.5	-14.0	-13.0	-11.5	-9.0	-6.5	-4.0	-1.5	0	1.0	3.5
17	86.7	90.3	92.2	92.7	89.4	87.4	89.4	93.2	90.6	91.5	86.2
18	82.9	95.0	95.2	94.7	96.3	99.5	102.3	95.5	87.6	84.4	81.3
19	81.8	96.4	98.2	97.3	93.0	95.3	95.2	91.5	83.6	86.7	74.3
20	85.4	96.5	98.6	98.8	95.1	98.5	98.0	88.3	90.1	93.1	75.1
21	85.7	95.5	96.8	96.3	92.7	97.9	97.4	83.8	94.6	96.6	82.1
22	83.1	93.8	95.3	94.1	89.1	94.3	92.8	85.8	94.9	93.6	81.5
23	81.2	91.9	93.9	93.1	86.9	92.6	88.0	89.4	91.9	86.6	81.0
24	78.0	89.8	91.1	90.7	86.3	88.5	78.1	88.3	84.2	84.8	75.2
25	72.6	87.3	87.8	86.1	81.1	81.3	82.5	81.0	83.1	84.3	75.4
26	72.7	88.1	87.8	85.3	81.5	77.9	83.5	80.5	80.9	78.2	77.2
27	67.3	82.2	82.4	79.2	76.7	71.3	78.9	78.0	75.1	75.4	74.0
28	65.2	79.6	77.6	72.7	69.8	66.4	73.7	74.2	74.7	74.5	73.5
29	65.0	75.3	72.7	69.8	66.0	65.5	72.8	73.1	74.0	73.1	74.5
30	65.0	74.5	70.8	68.0	66.1	65.9	69.4	71.2	73.4	72.3	72.8
31	65.0	71.3	69.4	67.1	65.9	65.0	67.0	70.1	72.8	72.3	72.8
32	65.0	69.7	67.4	65.7	65.0	65.0	65.9	70.5	73.3	73.2	72.0
33	65.0	68.0	65.9	65.3	65.0	65.0	66.1	70.1	72.5	70.9	70.3
34	65.0	65.0	65.0	65.0	65.0	65.0	65.0	69.6	71.5	70.5	68.4
35	65.0	65.0	65.0	65.0	65.0	65.0	65.0	68.1	70.2	69.1	66.8
36	65.0	65.0	65.0	65.0	65.0	65.0	65.0	66.0	68.5	67.7	65.5
37	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	67.0	66.1	65.0
38	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
39	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
40	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	78.2	89.9	90.6	89.6	85.8	88.2	87.5	86.0	89.0	88.2	82.8
D	87.6	97.8	98.8	97.9	93.2	97.6	97.3	94.9	96.7	96.2	88.8
OASPL	94.6	103.4	104.7	104.2	101.3	104.9	105.6	103.5	102.6	102.5	94.5
PNL	96.2	105.1	106.0	105.4	102.3	104.7	104.7	102.1	104.0	103.9	96.8
PNLT	96.2	105.1	106.0	105.4	102.3	104.7	104.7	102.1	104.0	103.9	96.8

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 25, 141 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-14.0	-11.5	-9.0	-6.5	-4.0	-1.5	0	1.0	3.5
17	88.9	92.1	88.5	86.4	90.4	91.5	91.3	90.7	89.0
18	90.7	99.0	98.5	98.2	101.4	101.3	90.2	86.3	83.0
19	91.2	99.9	97.3	93.8	97.0	92.1	87.2	82.8	74.8
20	90.5	101.5	100.7	98.2	99.4	93.0	85.3	91.2	82.6
21	86.5	98.5	99.1	95.4	97.9	88.0	89.7	94.3	88.8
22	84.1	96.1	97.1	92.8	93.4	81.5	91.6	93.1	86.9
23	80.2	94.4	94.6	91.8	89.5	84.0	91.7	89.5	84.6
24	77.1	92.4	92.3	90.2	84.2	84.0	86.8	80.5	78.7
25	78.5	87.5	87.0	81.9	76.7	83.7	77.8	80.6	80.7
26	77.2	86.0	86.3	75.2	80.5	78.1	82.9	79.2	79.9
27	71.2	83.2	82.8	70.2	76.1	74.4	77.2	76.5	75.6
28	68.6	78.3	76.7	70.5	71.6	72.4	73.9	74.1	75.9
29	66.5	74.9	75.8	71.4	68.3	71.6	73.1	73.7	76.2
30	65.1	72.1	76.6	69.4	67.5	68.9	72.4	73.1	75.4
31	65.0	68.2	72.7	65.3	65.1	67.6	71.6	73.0	74.1
32	65.0	67.3	70.2	65.0	65.0	67.1	72.2	74.1	73.3
33	65.0	65.7	65.4	65.0	65.4	66.5	72.3	73.0	71.8
34	65.0	65.0	65.0	65.0	65.0	65.7	71.4	72.0	70.1
35	65.0	65.0	65.0	65.0	65.0	65.1	69.6	70.9	68.0
36	65.0	65.0	65.0	65.0	65.0	65.0	68.7	69.7	66.4
37	65.0	65.0	65.0	65.0	65.0	65.0	66.7	67.7	65.5
38	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
39	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
40	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	80.7	91.3	91.5	87.7	87.9	84.0	87.7	87.7	85.6
D	91.1	100.7	100.1	96.4	97.6	94.5	95.9	95.4	91.9
OASPL	97.4	106.5	105.9	103.8	105.7	104.3	102.9	101.9	98.1
PNL	98.8	107.6	107.3	104.2	105.0	102.9	103.1	103.1	99.9
PNLT	98.8	107.6	107.3	104.2	105.0	102.9	103.1	103.1	99.9

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 26, 141 KT. FLY BY, CENTERLINE MIC. ( HARD SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-14.0	-12.0	-10.0	-8.0	-6.0	-4.0	-2.0	0	3.0
17	78.3	87.5	89.4	91.5	95.0	89.8	91.2	90.6	87.1
18	92.0	98.0	95.9	95.6	98.8	101.3	97.3	87.0	81.9
19	85.5	96.2	94.6	97.1	99.8	95.1	87.2	83.0	75.6
20	87.7	99.1	95.4	96.7	100.9	97.1	88.3	91.7	76.4
21	80.4	93.3	93.4	92.9	97.5	94.3	85.0	95.0	82.6
22	79.7	96.5	91.1	90.0	95.2	89.0	87.6	94.1	82.8
23	82.3	94.7	89.7	89.6	93.3	82.2	90.0	90.4	82.0
24	81.3	95.2	88.1	87.8	87.9	80.1	90.7	81.9	76.4
25	75.7	91.5	82.2	80.5	79.1	87.2	85.6	81.9	77.1
26	76.0	90.0	80.7	78.6	84.3	86.6	82.3	79.7	79.2
27	72.0	85.9	76.4	74.2	82.2	80.0	80.7	76.9	75.0
28	67.6	80.6	69.5	74.2	82.4	73.0	77.6	75.8	75.9
29	67.5	77.1	69.6	73.3	77.0	73.9	75.5	73.9	75.6
30	66.3	73.5	68.2	70.8	70.2	69.6	72.4	73.2	74.7
31	65.1	73.3	67.2	68.2	72.1	68.9	71.5	73.1	73.4
32	65.0	70.5	65.1	68.8	67.1	67.9	70.2	74.0	73.0
33	65.0	65.4	65.0	66.4	67.8	67.0	70.1	72.8	71.1
34	65.0	65.0	65.0	65.0	65.2	65.6	68.5	72.2	69.2
35	65.0	65.0	65.0	65.0	65.0	65.0	67.0	70.5	66.8
36	65.0	65.0	65.0	65.0	65.0	65.0	65.5	68.7	65.8
37	65.0	65.0	65.0	65.0	65.0	65.0	65.0	66.2	65.0
38	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
39	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
40	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	79.7	92.6	86.6	87.3	90.3	87.5	87.5	88.2	84.1
D	88.2	100.8	94.5	95.5	99.2	96.2	95.9	96.1	89.6
OASPL	95.9	105.7	101.8	102.9	106.3	104.7	103.5	102.4	95.6
PNL	97.2	107.5	102.9	103.7	107.0	104.1	103.3	103.6	97.7
PNLT	97.2	107.5	102.9	103.7	108.1	104.1	103.3	103.6	97.7

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

# TAB: H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 27, 141 KT. FLY BY, CENTERLINE MIC. ( HARD SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-11.0	-9.5	-8.0	-6.5	-5.0	-3.5	-2.0	-.5	0	2.5
17	88.0	94.1	93.8	91.3	93.3	90.3	93.9	91.5	90.9	90.9
18	96.3	100.1	100.8	103.0	102.9	102.5	97.9	87.4	87.6	83.4
19	93.1	99.7	98.7	97.9	99.7	95.3	89.4	83.6	84.4	76.6
20	93.1	101.1	101.0	103.7	102.7	98.6	90.6	91.7	93.7	82.9
21	89.2	99.1	99.6	102.8	100.4	95.9	85.9	94.4	96.3	88.8
22	85.3	97.9	97.5	99.6	97.4	89.2	84.3	95.3	95.9	87.6
23	82.9	96.7	95.7	97.8	94.2	82.3	89.6	92.8	91.8	83.9
24	80.9	95.0	95.2	94.3	87.9	85.0	91.5	85.1	84.2	77.6
25	74.9	91.6	90.7	86.6	83.6	80.3	87.2	82.7	84.8	81.0
26	75.6	91.4	90.1	81.3	88.4	87.6	83.6	82.5	80.7	78.9
27	71.7	87.2	86.6	81.7	88.3	81.8	81.7	78.3	79.0	76.8
28	70.3	84.2	83.6	84.7	85.2	76.5	79.9	75.8	76.2	76.5
29	68.4	79.8	79.5	85.8	80.1	77.3	74.4	75.3	75.2	77.1
30	67.8	76.2	79.3	83.6	76.1	72.5	74.1	74.7	74.7	76.0
31	65.5	76.2	78.8	78.9	75.8	70.8	71.3	74.4	74.8	74.7
32	65.0	74.6	79.1	78.1	72.5	69.9	71.8	74.4	75.0	74.4
33	65.0	72.4	75.9	76.0	70.4	69.0	71.9	73.3	73.5	72.3
34	65.0	68.9	71.4	74.6	67.3	66.8	70.7	72.7	73.0	69.7
35	65.0	65.6	67.0	71.5	65.0	65.0	68.1	71.0	71.2	67.8
36	65.0	65.0	66.1	67.3	65.0	65.0	65.9	68.9	69.4	66.7
37	65.0	65.0	65.0	67.0	65.0	65.0	65.0	66.7	66.7	65.3
38	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
39	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
40	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	82.2	94.7	94.2	94.5	93.1	89.3	88.8	89.5	89.9	85.6
D	92.1	102.7	101.8	103.0	101.5	97.9	96.7	97.4	97.6	91.8
OASPL	100.4	107.7	107.5	109.2	108.4	106.1	104.8	103.5	103.3	98.2
PNL	100.5	109.1	109.2	110.6	109.0	105.5	104.2	104.7	105.0	100.1
PNLT	100.5	109.1	109.2	110.6	109.0	105.5	104.2	104.7	105.0	100.1

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 12, 6 DEGREE APPROACH, CENTERLINE MIC. ( SOFT SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-14.0	-11.5	-9.0	-6.5	-4.0	-1.5	0	1.0	3.5	6.5
17	89.1	89.5	92.0	89.4	89.2	87.3	84.2	87.1	87.1	91.5
18	84.7	84.2	88.8	91.1	84.4	84.3	81.8	80.5	92.5	87.3
19	38.5	88.7	89.3	84.0	75.3	78.0	86.6	86.7	81.0	83.9
20	87.9	87.6	88.6	86.5	77.6	92.4	94.7	96.5	88.4	82.1
21	83.8	84.3	81.8	73.6	86.3	96.3	100.0	98.9	92.4	75.9
22	78.8	79.7	74.9	83.1	90.4	96.4	96.9	97.6	91.4	75.8
23	77.2	71.5	80.1	87.0	94.9	92.4	92.5	91.7	89.8	82.5
24	70.3	77.4	87.1	90.3	92.7	89.1	95.6	96.6	83.2	84.0
25	78.8	81.4	88.4	87.2	82.4	92.2	96.1	95.1	88.8	81.1
26	82.6	83.1	85.6	79.7	88.3	89.4	93.6	93.3	85.7	75.1
27	79.0	78.6	75.6	78.1	84.4	86.9	88.3	87.5	84.1	77.8
28	75.9	71.3	79.9	77.8	84.5	84.3	85.0	82.6	81.7	75.4
29	70.8	76.4	76.3	76.8	83.4	81.5	83.2	79.9	79.3	74.3
30	71.6	69.9	77.1	73.0	80.9	79.3	79.8	77.9	76.3	71.7
31	68.1	71.1	73.5	71.9	78.4	76.6	76.5	75.4	74.6	71.5
32	66.6	68.4	72.5	70.7	77.0	75.0	75.0	74.4	76.5	71.4
33	65.0	67.0	70.7	69.4	73.8	72.1	71.2	70.6	70.7	66.8
34	65.0	65.4	69.0	67.1	72.3	69.6	69.4	68.9	69.8	65.7
35	65.0	65.0	67.5	65.0	68.9	67.2	67.1	66.8	68.3	65.0
36	65.0	65.0	65.7	65.0	66.9	65.7	66.3	65.9	67.1	65.0
37	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.2	65.0
38	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
39	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
40	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	82.8	83.8	87.4	87.8	92.1	93.2	95.8	95.2	90.1	83.6
D	88.9	89.6	93.4	93.6	98.0	99.6	102.3	102.0	96.4	89.4
OASPL	95.3	95.7	98.2	98.3	102.4	103.3	105.5	105.6	101.1	95.2
PNL	98.5	99.0	102.2	102.1	105.5	106.2	108.6	108.1	103.7	98.6
PNLT	98.5	100.9	103.5	102.1	105.5	106.2	108.6	108.1	105.0	98.6

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0



# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 17, 60 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-30.5	-25.5	-20.5	-15.5	-10.5	-5.5	-4.5	-3.5	0	4.5	7.5
17	83.0	83.6	84.1	85.1	86.8	89.4	92.8	79.8	82.3	77.9	82.5
18	79.8	79.7	79.8	78.3	82.2	91.8	90.4	80.8	78.7	80.9	73.8
19	83.1	85.8	83.6	82.7	82.9	91.0	89.5	81.3	83.3	73.9	73.9
20	83.1	87.1	83.3	82.0	85.8	84.5	81.4	88.7	88.0	81.4	66.2
21	80.5	88.0	79.4	78.4	82.0	74.3	78.6	91.1	91.3	84.2	69.4
22	78.1	85.5	73.8	71.4	73.8	82.8	89.3	90.7	90.3	83.7	73.2
23	74.8	78.6	75.5	69.4	69.1	90.3	92.7	80.4	78.7	83.0	73.7
24	71.4	78.9	72.8	68.1	77.9	89.5	88.1	82.8	83.9	74.6	74.2
25	72.2	77.8	71.9	71.0	85.9	85.9	78.8	82.2	80.7	81.6	66.1
26	73.3	80.6	63.3	75.6	83.2	79.9	86.3	76.2	81.1	77.6	70.4
27	73.3	75.3	68.3	70.0	75.4	82.5	82.6	76.7	78.6	79.1	69.4
28	72.1	69.2	73.3	68.7	69.5	78.7	80.5	73.6	74.0	76.6	71.9
29	67.6	75.1	72.7	65.6	75.8	79.3	78.9	70.7	72.9	75.9	68.6
30	67.5	79.1	66.1	65.7	69.7	76.9	76.7	70.5	71.4	74.1	67.0
31	65.0	78.1	66.1	65.5	72.5	74.8	76.4	68.5	69.4	72.6	66.1
32	65.0	71.1	67.0	65.0	69.3	74.3	75.7	69.0	69.7	73.9	69.5
33	65.0	70.7	65.0	65.0	67.7	72.3	73.5	66.2	67.0	68.7	65.0
34	65.0	65.5	65.0	65.0	66.3	70.8	71.6	65.2	65.9	66.7	65.0
35	65.0	65.0	65.0	65.0	65.0	68.0	69.3	65.0	65.1	65.3	65.0
36	65.0	65.0	65.0	65.0	65.0	65.6	67.1	65.0	65.0	65.0	65.0
37	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
38	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
39	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
40	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	76.9	85.5	78.9	76.0	84.9	88.7	89.4	84.9	85.1	84.5	77.1
D	84.4	89.5	85.1	83.8	90.0	94.2	95.7	91.8	92.1	90.2	83.1
OASPL	90.5	94.4	91.0	91.2	94.3	100.1	100.8	96.8	97.1	97.8	88.0
PNL	94.6	99.1	94.5	93.7	99.0	102.8	104.1	100.0	100.2	98.0	92.9
PNLT	94.6	99.1	94.5	93.7	101.1	102.8	104.1	100.0	100.2	99.0	94.3

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 18, 60 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-36.5	-30.5	-24.5	-18.5	-12.5	-6.5	-.5	0	5.5	7.5
17	79.5	87.5	85.2	87.7	89.0	84.1	83.4	84.3	78.6	86.9
18	76.4	85.7	84.3	83.7	88.3	91.9	83.9	81.4	78.9	82.0
19	80.5	88.7	86.9	87.9	88.8	88.0	79.6	82.3	73.0	73.3
20	79.8	87.9	87.7	87.9	92.1	89.1	87.3	88.2	76.0	67.7
21	79.3	83.0	85.1	86.9	89.5	78.9	89.0	90.4	82.1	72.6
22	81.3	79.7	78.0	85.3	82.3	77.1	91.7	93.4	82.6	73.6
23	80.5	79.6	76.8	78.7	75.3	83.4	87.0	85.4	80.2	76.1
24	74.5	83.5	75.8	78.2	75.9	89.1	83.8	87.7	73.3	77.9
25	73.6	79.4	72.3	71.5	80.0	83.2	88.3	88.8	76.0	68.3
26	70.4	74.3	72.9	73.7	84.3	78.8	84.0	83.5	77.7	72.9
27	72.7	70.0	71.4	78.3	81.2	80.5	82.7	81.4	77.5	72.1
28	71.6	69.3	71.5	80.6	79.7	79.7	77.8	80.4	74.2	72.6
29	72.0	69.1	68.3	78.2	74.3	77.5	76.8	78.6	73.9	69.9
30	71.0	66.3	66.3	70.7	77.3	75.2	76.3	77.2	72.5	68.1
31	68.2	66.5	65.7	71.2	72.2	75.4	74.4	74.5	71.1	67.4
32	66.0	65.4	65.2	69.6	73.3	74.1	72.7	72.8	73.8	70.3
33	65.0	65.0	65.0	66.8	71.8	71.8	70.8	70.3	67.9	65.3
34	65.0	65.0	65.0	65.2	69.7	69.4	69.1	68.9	65.7	65.0
35	65.0	65.0	65.0	65.0	65.7	66.6	66.5	66.2	65.0	65.0
36	65.0	65.0	65.0	65.0	65.0	65.2	65.7	65.5	65.0	65.0
37	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
38	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
39	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
40	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	78.4	80.5	78.7	83.9	86.6	86.5	89.0	90.3	82.7	78.8
D	85.1	88.8	86.7	89.5	92.2	92.9	95.0	95.8	88.2	84.9
OASPL	90.0	94.7	93.5	95.0	97.4	97.9	97.8	98.9	95.6	91.3
PNL	95.1	97.7	96.7	98.6	101.2	101.9	102.4	103.1	96.7	94.1
PNLT	95.1	97.7	96.7	98.6	102.5	101.9	102.4	103.1	98.1	95.5

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 20, 9 DEGREE APPROACH, CENTERLINE MIC. ( SOFT SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-15.0	-12.0	-9.0	-6.0	-3.0	0	3.0	6.0	7.5
17	87.9	88.2	90.2	89.5	80.8	76.8	85.2	38.0	89.0
18	82.2	83.2	85.3	86.5	75.9	82.9	85.4	84.5	85.6
19	83.1	84.1	83.8	79.2	79.1	86.1	81.5	82.6	82.2
20	77.5	79.2	80.4	79.2	79.0	92.9	94.6	78.3	77.2
21	71.2	72.1	71.1	75.3	90.2	99.3	93.7	81.1	78.4
22	76.1	73.3	75.6	86.0	93.2	96.7	94.9	82.7	73.3
23	72.2	74.8	83.7	89.1	94.6	92.2	89.1	83.0	76.1
24	75.2	84.6	88.9	91.8	90.4	94.6	86.6	83.5	79.0
25	80.2	84.4	87.3	86.2	88.8	95.6	89.9	81.5	80.6
26	83.1	84.7	83.5	80.3	88.4	81.6	84.0	78.6	77.8
27	76.2	78.9	75.5	80.2	83.7	88.3	83.3	78.7	74.8
28	66.7	75.1	76.6	77.5	82.1	85.1	80.4	76.2	75.5
29	69.6	76.2	71.4	78.7	81.8	82.1	78.7	74.9	72.8
30	66.5	72.1	70.9	73.6	76.4	80.2	75.8	72.9	71.3
31	66.6	69.7	68.7	71.6	74.7	77.3	74.1	71.2	69.9
32	65.2	67.2	67.2	70.7	72.8	74.0	75.8	71.7	71.0
33	65.0	65.7	66.3	68.8	70.7	71.6	70.0	67.1	65.7
34	65.0	65.0	65.0	66.0	68.2	69.2	69.7	66.3	65.0
35	65.0	65.0	65.0	65.0	66.4	66.8	69.3	65.7	65.0
36	65.0	65.0	65.0	65.0	65.5	65.7	68.0	65.0	65.0
37	65.0	65.0	65.0	65.0	65.0	65.0	66.2	65.0	65.0
38	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
39	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
40	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	81.6	85.1	86.6	88.4	91.2	94.6	90.8	84.2	82.0
D	87.0	89.9	92.2	94.5	97.6	101.5	97.4	90.0	87.5
OASPL	93.6	95.0	97.3	99.4	101.7	104.7	102.4	95.1	93.0
PNL	97.1	99.1	100.4	102.5	104.7	108.0	104.6	98.7	96.9
PNLT	98.1	99.1	101.5	103.5	104.7	108.0	105.9	98.7	97.9

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 22, 100 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-24.5	-20.0	-15.5	-11.0	-6.5	-2.0	0	2.5	7.0	8.5
17	76.8	82.7	84.5	85.6	87.6	91.8	85.4	85.9	80.1	77.4
18	81.3	86.5	88.3	89.6	90.2	81.9	85.5	82.6	74.7	70.8
19	77.8	86.7	88.2	87.2	86.1	85.6	77.1	80.0	78.1	74.5
20	71.6	81.4	85.8	84.3	87.6	79.5	86.1	87.9	69.5	68.9
21	73.7	84.1	86.1	82.8	86.8	79.0	91.4	89.8	65.6	68.1
22	70.7	81.6	83.1	80.9	82.5	80.4	89.8	87.4	69.4	65.0
23	68.1	79.1	80.9	78.1	75.2	87.5	83.4	82.2	72.9	66.1
24	67.0	73.6	71.7	69.9	71.0	85.9	79.4	78.0	72.7	67.6
25	66.1	70.0	73.9	72.2	79.3	78.3	78.0	78.5	69.6	67.2
26	65.4	70.8	72.5	66.8	83.0	83.8	69.2	74.2	65.6	66.3
27	65.4	69.9	71.7	65.0	78.4	83.7	70.4	73.9	70.4	65.0
28	65.0	68.4	71.2	67.5	73.0	79.5	68.9	73.3	69.1	66.2
29	65.0	65.7	65.1	66.6	76.5	73.7	67.4	74.3	68.0	65.8
30	65.0	65.0	65.6	66.0	75.8	78.1	67.3	71.8	65.1	65.0
31	65.0	65.0	65.2	65.0	75.6	74.4	66.8	70.0	66.8	65.6
32	65.0	65.0	65.0	65.0	73.7	75.4	68.1	71.7	66.5	65.5
33	65.0	65.0	65.0	65.0	74.2	72.3	66.9	68.2	65.0	65.0
34	65.0	65.0	65.0	65.0	72.1	71.9	66.3	67.0	65.0	65.0
35	65.0	65.0	65.0	65.0	69.0	63.7	65.7	66.3	65.0	65.0
36	65.0	65.0	65.0	65.0	66.8	67.3	65.2	65.5	65.0	65.0
37	65.0	65.0	65.0	65.0	65.0	65.3	65.0	65.0	65.0	65.0
38	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
39	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
40	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	69.5	77.0	78.9	76.5	86.1	88.0	83.4	83.5	76.2	72.9
D	79.8	86.1	87.6	86.4	91.5	93.0	91.8	91.0	82.5	80.1
GASPL	86.5	93.1	95.2	95.4	97.1	96.7	97.1	97.0	86.4	83.7
PNL	92.1	95.5	96.8	95.7	100.2	101.2	99.2	99.3	92.6	91.5
PNLT	92.1	95.5	96.8	95.7	100.2	101.2	99.2	99.3	92.6	91.5

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 23, 100 KI. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-33.5	-26.5	-19.5	-12.5	-5.5	0	1.5	8.5	15.5	18.0
17	67.2	72.3	80.9	83.4	88.7	85.8	87.4	76.1	66.5	66.6
18	71.5	76.4	85.6	87.8	92.6	85.1	80.0	70.1	70.6	68.0
19	69.6	74.7	83.7	86.0	87.1	77.0	83.3	74.5	66.1	65.0
20	67.5	69.6	78.1	83.9	88.7	85.5	89.0	69.9	67.1	65.5
21	65.7	71.4	81.1	85.6	84.4	89.3	90.2	67.3	66.1	65.0
22	63.5	68.0	77.8	81.4	76.9	87.2	87.4	65.0	65.2	65.0
23	65.1	67.9	74.5	78.2	69.5	80.4	79.0	65.5	65.0	65.0
24	63.6	65.0	69.2	68.2	74.5	75.5	80.7	67.5	65.0	65.0
25	63.5	65.0	65.3	65.0	76.6	75.0	77.7	67.8	65.0	65.0
26	63.5	65.0	65.1	65.0	79.9	71.1	73.0	67.2	65.0	65.0
27	63.5	65.0	65.0	65.0	74.2	70.2	63.7	65.0	65.0	65.0
28	63.5	65.0	65.0	65.0	67.0	68.4	69.2	65.4	65.0	65.0
29	63.5	65.0	65.0	65.0	66.5	68.6	71.8	65.0	65.0	65.0
30	63.5	65.0	65.0	65.0	65.5	68.3	68.6	65.1	65.0	65.0
31	63.5	65.0	65.0	65.0	65.0	67.7	69.4	66.2	65.0	65.0
32	63.5	65.0	65.0	65.0	65.0	69.5	70.4	65.5	65.0	65.0
33	63.5	65.0	65.0	65.0	65.0	68.8	68.5	65.0	65.0	65.0
34	63.5	65.0	65.0	65.0	65.0	67.8	67.3	65.0	65.0	65.0
35	63.5	65.0	65.0	65.0	65.0	66.8	66.2	65.0	65.0	65.0
36	63.5	65.0	65.0	65.0	65.0	66.0	66.2	65.0	65.0	65.0
37	63.5	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
38	63.5	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
39	63.5	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
40	63.5	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	65.2	67.5	72.5	75.4	80.2	81.6	82.9	73.1	67.7	66.0
D	76.5	78.4	83.3	86.0	88.4	89.7	91.0	80.1	78.2	77.5
GASPL	78.5	82.4	91.5	94.2	97.8	95.6	96.6	83.5	77.1	75.2
PNL	89.5	91.5	93.5	95.5	97.6	98.4	99.1	91.4	90.8	90.7
PNLT	89.5	91.5	93.5	95.5	97.6	98.4	99.1	91.4	90.8	90.7

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 24, 141 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-16.5	-14.0	-12.5	-11.5	-9.0	-6.5	-4.0	-1.5	0	1.0	3.5
17	85.7	89.3	91.5	90.6	85.8	85.3	90.0	93.3	90.3	90.6	84.7
18	86.1	95.5	96.7	96.3	96.5	99.9	102.9	92.4	87.6	83.9	80.4
19	81.8	96.0	97.5	96.6	90.4	92.2	94.9	92.0	83.1	86.3	74.3
20	83.5	96.2	98.4	98.9	94.6	96.1	97.5	86.1	90.0	92.6	71.2
21	83.1	94.8	96.9	97.3	93.4	96.8	96.9	83.7	94.3	95.4	78.0
22	83.3	92.7	95.1	95.1	90.6	93.9	89.9	87.4	93.8	92.1	78.4
23	81.5	92.0	94.8	93.7	87.4	92.3	85.2	89.4	90.1	85.1	78.9
24	78.2	89.2	92.3	91.8	85.9	85.9	78.1	87.1	84.2	85.7	74.7
25	74.2	85.7	87.6	87.9	80.0	78.3	81.9	79.0	84.0	84.9	74.2
26	73.0	84.0	87.5	87.3	78.5	75.0	82.3	81.8	79.2	78.7	77.6
27	69.4	79.4	82.4	80.4	72.7	67.6	77.8	77.3	75.5	74.6	74.0
28	66.1	76.2	76.2	73.4	66.2	67.2	70.2	74.2	74.3	74.7	73.3
29	65.0	73.9	72.6	69.3	66.0	67.7	72.3	72.8	73.0	73.4	73.0
30	65.0	72.3	70.6	68.9	66.8	66.3	67.7	71.4	72.3	71.9	70.8
31	65.0	69.3	67.2	69.0	66.1	65.0	66.1	70.5	71.1	71.3	70.7
32	65.0	67.0	65.0	63.4	65.0	65.0	65.3	70.6	72.2	72.5	69.4
33	65.0	66.5	65.0	65.7	65.0	65.0	66.2	70.4	71.5	70.4	67.4
34	65.0	65.0	65.0	65.0	65.0	65.0	65.0	69.7	70.7	70.3	66.5
35	65.0	65.0	65.0	65.0	65.0	65.0	65.0	67.3	69.9	69.0	65.6
36	65.0	65.0	65.0	65.0	65.0	65.0	65.0	66.8	68.4	67.7	65.2
37	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.4	66.9	66.1	65.0
38	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.1	65.0
39	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
40	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	78.3	87.9	91.0	90.5	85.5	86.9	86.6	86.3	88.2	87.8	81.2
E	87.1	96.8	99.0	98.8	92.8	96.2	96.4	94.7	95.6	95.3	86.9
OASPL	94.1	102.8	104.8	104.5	100.3	103.6	105.0	102.8	101.6	101.3	92.8
PNL	96.0	104.3	106.1	105.9	101.8	103.6	104.4	101.9	103.2	103.3	95.6
PNLT	96.0	104.3	106.1	105.9	101.8	103.6	105.5	101.9	103.2	103.3	95.6

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 25, 141 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-14.0	-11.5	-9.0	-6.5	-4.0	-1.5	0	1.0	3.5
17	88.0	90.7	87.7	85.3	87.3	93.6	90.6	90.4	86.7
18	92.4	100.2	99.4	99.5	102.0	99.8	87.5	84.9	81.6
19	90.0	98.5	96.1	92.8	94.1	93.8	84.9	84.4	76.9
20	89.8	100.3	99.0	96.9	98.0	91.0	87.1	91.2	77.2
21	85.3	96.3	97.7	96.8	97.1	85.1	91.5	93.7	84.2
22	82.9	92.2	94.8	94.1	91.1	82.1	91.7	91.0	83.3
23	78.9	89.2	94.0	91.4	87.0	86.2	90.3	86.0	83.4
24	75.1	89.8	94.5	87.2	80.0	86.5	83.9	81.1	76.8
25	74.1	84.8	87.4	77.5	79.2	82.3	80.2	81.7	78.7
26	73.3	86.1	85.7	74.9	81.6	78.7	82.2	79.1	79.7
27	69.8	83.0	80.3	75.7	76.2	77.2	76.0	75.9	76.1
28	65.2	78.3	74.9	75.6	71.5	73.6	74.1	74.3	75.4
29	65.0	76.2	72.1	73.7	68.4	71.9	73.5	73.5	75.5
30	65.0	73.0	71.0	69.0	66.8	70.1	73.1	72.1	73.3
31	65.0	69.3	70.1	65.0	65.2	69.3	72.2	71.4	72.1
32	65.0	68.5	68.5	65.0	65.0	68.7	72.2	72.7	71.1
33	65.0	65.7	65.1	65.0	65.0	68.7	72.3	72.0	70.0
34	65.0	65.0	65.0	65.0	65.0	67.4	72.1	71.8	68.8
35	65.0	65.0	65.0	65.0	65.0	65.8	70.8	70.2	66.6
36	65.0	65.0	65.0	65.0	65.0	65.6	69.4	68.9	65.9
37	65.0	65.0	65.0	65.0	65.0	65.0	67.6	67.5	65.0
38	65.0	65.0	65.0	65.0	65.0	65.0	65.1	65.1	65.0
39	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
40	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	79.1	89.8	91.0	87.7	86.8	84.9	87.1	86.4	83.3
D	89.0	98.5	99.2	96.1	95.9	94.6	95.0	94.2	89.5
OASPL	96.9	105.1	105.1	103.8	104.7	103.5	101.3	100.8	95.3
PNL	98.0	106.4	106.3	104.0	103.9	102.7	102.6	102.5	98.1
PNLT	98.0	106.4	106.3	104.0	103.9	102.7	102.6	102.5	98.1

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTOR

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 26, 141 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-13.5	-11.5	-9.5	-7.5	-5.5	-3.5	-1.5	0	.5	3.0
17	80.6	87.3	89.1	92.2	92.0	87.7	92.9	89.7	89.8	87.2
18	94.0	99.0	97.2	98.3	100.1	102.2	95.5	87.0	85.4	82.6
19	85.8	96.6	94.3	96.9	98.6	93.1	88.5	83.7	84.7	73.2
20	89.9	100.0	96.8	96.0	100.2	97.0	86.2	90.7	91.8	80.0
21	86.2	99.1	94.7	92.7	97.3	94.0	85.4	94.1	94.8	84.5
22	82.2	97.1	92.3	91.7	93.6	87.2	87.4	93.3	92.4	83.7
23	82.7	95.5	91.1	90.6	90.8	81.1	90.3	90.4	87.9	81.9
24	76.5	95.1	89.2	86.9	85.8	81.8	90.4	83.5	82.3	75.8
25	72.4	90.8	84.1	78.3	78.6	87.0	83.1	83.9	83.4	79.8
26	73.3	89.4	82.0	75.5	84.5	84.6	83.2	81.5	79.4	79.1
27	70.1	83.8	75.2	72.9	83.8	77.1	80.6	77.8	77.1	76.8
28	66.0	79.6	71.1	73.3	82.2	71.5	77.3	75.4	74.9	76.3
29	65.8	74.8	70.4	72.4	76.1	73.2	75.9	74.8	73.8	75.3
30	66.2	72.2	69.1	70.3	70.8	68.1	73.4	74.2	72.3	74.3
31	65.0	70.8	66.9	65.4	70.7	67.6	71.7	73.5	72.5	72.2
32	65.0	67.9	65.0	65.0	66.5	66.2	71.1	72.9	72.3	71.8
33	65.0	65.9	65.0	65.0	66.9	65.8	71.5	73.2	72.7	69.8
34	65.0	65.0	65.0	65.0	65.0	65.2	69.3	72.8	72.3	68.4
35	65.0	65.0	65.0	65.0	65.0	65.0	67.7	70.8	70.3	66.7
36	65.0	65.0	65.0	65.0	65.0	65.0	66.0	68.9	68.4	65.7
37	65.0	65.0	65.0	65.0	65.0	65.0	65.0	67.1	66.8	65.0
38	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
39	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
40	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	79.3	92.9	87.6	86.9	89.7	86.1	88.0	88.6	87.7	83.9
D	89.0	100.9	95.8	95.1	97.5	95.7	95.6	95.8	95.0	89.8
OASPL	96.8	106.1	102.5	103.0	105.5	104.3	103.1	101.8	101.4	95.7
PNL	97.9	107.4	103.9	103.2	106.3	104.0	103.3	103.5	103.2	97.9
PNLT	97.9	107.4	103.9	103.2	106.3	105.2	103.3	103.5	103.2	97.9

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0



# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 27, 141 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-11.0	-9.5	-8.0	-6.5	-5.0	-3.5	-2.0	-.5	0	2.5
17	85.4	91.8	91.5	87.8	89.4	88.1	95.5	91.3	90.6	90.9
18	96.6	99.8	100.8	103.5	104.0	103.2	97.9	87.7	86.9	83.3
19	88.7	97.5	96.8	95.8	96.9	93.9	91.6	84.8	85.9	76.5
20	91.9	100.8	100.5	102.8	101.9	98.6	90.6	91.5	93.6	85.1
21	88.1	99.8	99.0	101.7	100.2	95.7	84.6	94.3	96.3	89.4
22	83.9	98.4	96.9	99.4	96.9	89.3	83.5	94.5	95.2	87.5
23	83.0	97.0	96.1	97.5	93.2	81.5	90.0	91.8	90.3	83.7
24	81.2	96.9	95.0	93.0	84.8	85.5	92.2	85.2	85.7	79.0
25	78.5	93.9	90.1	86.6	84.2	90.2	86.5	84.5	85.6	81.9
26	81.4	94.1	88.6	84.1	89.3	86.9	83.9	82.6	80.6	79.3
27	77.3	89.7	83.5	83.0	87.6	80.6	82.7	77.8	77.7	78.3
28	75.5	86.8	78.6	85.5	85.5	75.3	78.4	75.6	75.9	76.4
29	72.8	83.8	77.6	85.6	80.3	76.2	75.3	75.1	74.9	76.5
30	70.6	80.8	77.9	81.3	77.8	71.0	73.5	75.0	74.4	75.4
31	69.9	76.7	75.7	78.4	75.7	71.4	72.6	73.9	73.7	73.1
32	68.7	74.8	74.1	74.6	71.1	70.1	72.3	74.2	74.0	72.7
33	67.2	72.6	74.9	76.9	70.0	68.3	72.6	73.4	73.4	71.0
34	65.0	70.5	69.7	71.1	66.1	66.2	70.6	72.9	73.2	69.6
35	65.0	66.5	66.1	69.1	65.3	65.0	69.0	70.9	70.9	68.1
36	65.0	65.0	65.0	67.2	65.0	65.0	65.9	69.7	69.7	66.8
37	65.0	65.0	65.0	65.0	65.0	65.0	65.0	67.5	67.6	65.2
38	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
39	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
40	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	83.7	96.0	93.6	93.8	91.7	89.2	89.2	89.2	89.7	85.4
D	91.5	103.3	101.3	102.4	100.5	97.8	96.6	96.7	97.1	91.6
OASPL	99.3	107.7	106.7	108.6	107.7	105.7	104.7	102.6	102.8	98.0
PNL	100.8	110.0	108.3	109.7	108.4	105.5	104.6	104.4	104.8	100.3
PNLT	100.8	110.0	109.3	111.1	108.4	106.5	104.6	104.4	104.8	100.3

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 28, 150 KT. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-10.5	-9.0	-7.5	-6.0	-4.5	-3.0	-1.5	0	2.5
17	88.6	91.2	92.8	94.4	89.5	89.1	92.5	93.2	89.9
18	95.9	102.3	103.1	100.6	103.3	105.0	103.1	89.9	85.0
19	93.6	98.8	100.3	100.1	96.5	96.1	92.8	86.0	78.9
20	94.2	101.1	102.6	101.1	101.8	102.4	96.1	91.1	86.5
21	92.5	100.1	102.2	98.8	100.2	100.1	91.0	93.9	89.6
22	90.2	97.3	100.4	96.7	97.1	95.0	85.4	93.2	88.7
23	86.7	95.0	98.8	94.8	93.4	89.1	88.9	92.9	86.7
24	85.0	92.2	97.9	91.6	87.9	85.1	91.2	88.7	81.4
25	78.7	88.3	94.7	85.1	80.2	89.1	89.7	86.8	84.1
26	75.9	86.9	93.7	83.4	87.6	90.9	84.8	87.0	83.2
27	74.8	82.4	88.8	82.7	85.4	86.2	84.2	82.1	80.1
28	71.1	81.1	85.6	83.9	84.8	78.7	80.2	79.5	78.5
29	72.0	77.5	84.0	83.3	80.3	74.6	77.7	78.2	78.9
30	70.2	76.2	81.0	78.9	75.9	73.6	75.6	77.0	77.8
31	69.4	76.6	79.3	74.6	76.5	69.7	72.9	75.5	75.5
32	66.9	74.6	76.6	76.3	73.2	68.6	72.0	76.0	74.6
33	65.9	71.2	72.7	72.7	71.8	67.2	71.7	75.2	72.8
34	65.0	66.3	72.0	69.4	68.2	65.4	70.5	74.4	71.9
35	65.0	65.0	67.8	65.3	65.6	65.0	68.9	73.3	70.1
36	65.0	65.0	65.3	65.0	65.0	65.0	66.4	71.5	68.5
37	65.0	65.0	65.0	65.0	65.0	65.0	65.3	69.4	66.9
38	65.0	65.0	65.0	65.0	65.0	65.0	65.0	66.5	65.3
39	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
40	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	84.6	93.0	97.6	92.5	92.3	91.7	90.1	91.1	87.4
D	94.5	101.3	104.9	100.6	100.5	100.5	97.8	97.9	93.5
OASPL	100.9	107.3	109.8	107.0	107.5	107.9	106.2	104.6	99.2
PNL	102.0	108.2	111.4	108.3	108.2	108.0	106.1	105.7	101.7
PNLT	102.0	108.2	111.4	108.3	108.2	108.0	106.1	105.7	101.7

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 29, 150 KI. FLY BY, CENTERLINE MIC. ( SOFT SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-10.5	-9.0	-7.5	-6.5	-6.0	-4.5	-3.0	-1.5	0	2.5
17	92.3	95.3	91.4	91.1	91.4	93.9	91.1	98.6	94.5	90.9
18	98.4	103.3	104.6	104.3	104.2	104.8	105.4	101.3	90.5	85.8
19	90.7	98.1	98.4	99.5	100.4	101.5	97.9	97.1	87.1	80.2
20	93.7	102.5	104.7	105.5	105.4	104.7	102.8	95.7	93.2	87.4
21	87.2	99.5	102.4	103.0	103.3	102.3	99.7	88.5	94.4	91.5
22	86.9	97.2	100.5	102.1	102.1	100.3	94.6	84.4	95.1	91.2
23	86.0	92.9	99.3	100.6	100.6	97.2	88.4	88.6	93.7	89.6
24	87.0	90.3	96.7	98.9	98.7	93.2	85.7	90.7	88.2	83.0
25	85.8	86.1	94.0	94.7	94.2	85.4	90.0	88.4	86.4	86.3
26	85.3	86.8	95.2	94.4	93.4	89.8	92.3	83.6	88.2	84.6
27	82.5	84.1	92.2	90.0	88.3	90.6	88.0	83.2	83.0	81.5
28	80.4	82.3	90.3	88.1	86.8	90.4	80.9	77.9	81.4	79.7
29	75.5	82.5	88.4	86.3	86.7	88.5	78.8	75.8	79.5	78.1
30	73.5	81.2	85.9	86.6	86.5	83.6	77.3	74.2	79.0	77.4
31	72.7	78.5	82.9	85.4	85.7	84.8	72.8	72.6	78.2	75.7
32	69.7	74.8	82.5	83.9	83.7	81.2	70.5	72.6	77.6	73.9
33	67.7	73.9	80.4	81.9	82.2	80.5	69.0	72.5	76.4	72.7
34	65.9	71.2	77.0	78.3	78.8	78.2	66.5	71.3	76.2	71.6
35	65.0	68.0	73.8	76.2	76.1	73.3	65.2	69.4	74.3	69.7
36	65.0	65.9	69.3	70.8	71.0	72.4	65.0	67.4	72.6	68.5
37	65.0	65.3	65.2	67.2	67.3	68.5	65.0	66.8	70.1	66.3
38	65.0	65.0	65.0	65.0	65.0	69.9	65.0	65.0	66.5	65.2
39	65.0	65.0	65.0	65.0	65.0	66.0	65.0	65.0	65.0	65.0
40	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	87.1	92.9	98.9	99.3	99.2	97.8	92.7	89.1	92.0	88.8
D	94.7	101.2	105.3	106.3	106.6	104.7	101.2	97.8	99.0	95.1
OASPL	101.9	107.9	110.2	110.9	111.1	110.3	108.5	106.6	105.0	100.3
PNL	103.2	109.2	112.9	113.5	113.4	112.4	108.8	105.5	106.7	103.1
PNLT	103.2	109.2	112.9	113.5	113.4	112.4	108.8	105.5	106.7	103.1

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 30, 126 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-12.0	-10.0	-8.0	-6.0	-4.0	-2.0	0	2.0	4.0
17	79.6	86.8	86.4	87.4	88.6	90.4	88.7	88.7	84.3
18	90.1	99.2	99.2	98.1	100.3	96.3	86.0	82.9	81.4
19	80.2	94.1	94.3	94.5	93.8	90.6	83.1	83.1	75.1
20	80.9	95.5	95.9	94.1	93.1	89.0	89.9	88.9	70.8
21	82.7	95.9	95.3	91.9	92.6	82.5	92.9	90.3	75.1
22	83.0	92.7	91.4	87.7	87.0	80.3	91.3	86.0	77.9
23	80.0	90.5	88.1	83.5	78.9	83.6	86.8	78.3	77.6
24	77.5	87.3	84.5	79.8	72.0	83.1	79.3	79.9	75.7
25	70.9	80.4	76.7	70.0	72.6	78.2	78.7	79.5	70.4
26	65.8	77.8	71.8	69.6	78.6	76.5	75.9	75.8	75.7
27	65.4	75.6	69.3	71.2	76.9	75.9	73.3	74.6	72.9
28	65.3	70.3	65.6	72.6	70.6	73.2	71.9	74.9	73.3
29	65.0	67.6	65.2	67.6	69.2	72.1	72.2	75.5	72.0
30	65.0	65.6	65.0	65.4	66.9	70.7	71.2	73.8	71.0
31	65.0	65.0	65.0	66.2	65.4	67.8	70.5	72.5	70.7
32	65.0	65.0	65.0	65.0	65.0	67.8	71.9	73.1	70.2
33	65.0	65.0	65.0	65.0	65.5	67.9	71.6	71.2	67.6
34	65.0	65.0	65.0	65.0	65.0	66.5	70.8	69.5	66.3
35	65.0	65.0	65.0	65.0	65.0	65.3	68.9	68.0	65.5
36	65.0	65.0	65.0	65.0	65.0	65.0	68.3	67.4	65.2
37	65.0	65.0	65.0	65.0	65.0	65.0	66.0	65.3	65.0
38	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
39	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
40	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	76.7	86.2	84.7	83.0	83.1	83.2	85.3	84.8	80.7
D	86.3	95.5	94.8	92.0	92.6	91.0	93.4	91.5	86.1
OASPL	94.0	103.0	102.7	101.5	102.3	100.8	99.6	97.9	92.1
PNL	95.4	103.5	102.5	101.0	101.8	100.3	101.5	100.2	94.9
PNLT	95.4	103.5	102.5	102.0	101.8	100.3	101.5	100.2	94.9

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 31, 126 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-14.0	-11.5	-9.0	-6.5	-4.0	-1.5	0	1.0	3.5	4.0
17	77.5	81.6	85.4	85.3	88.1	90.7	89.1	89.7	83.3	81.4
18	84.9	96.6	99.6	98.9	99.7	92.4	87.0	83.9	81.3	78.2
19	76.3	85.9	92.1	92.5	93.0	91.3	84.6	87.9	72.6	72.9
20	78.4	89.7	96.5	95.7	93.4	86.3	91.5	93.6	71.8	67.9
21	79.9	85.9	96.2	94.8	94.1	82.7	94.0	94.9	79.9	71.2
22	79.3	85.4	93.2	93.1	89.7	85.6	93.5	92.2	79.0	71.7
23	79.6	84.3	92.0	91.3	83.0	88.6	89.0	83.5	78.1	75.1
24	77.4	83.6	90.2	88.3	73.4	86.9	82.9	85.2	72.3	72.9
25	69.1	76.0	83.3	77.9	75.3	78.3	81.2	81.2	73.0	68.5
26	67.0	73.3	78.8	69.3	79.6	78.8	79.7	76.4	76.8	75.3
27	65.0	70.2	74.7	68.4	76.3	78.5	75.8	72.9	74.5	73.2
28	65.0	67.7	67.6	69.2	73.0	74.8	74.0	73.3	74.1	72.2
29	65.0	65.8	68.1	68.4	65.9	73.9	73.3	72.6	72.3	70.1
30	65.0	65.9	67.6	65.9	65.9	73.7	72.4	71.2	71.8	69.1
31	65.0	65.0	65.0	65.0	65.2	73.0	72.9	71.9	71.0	68.9
32	65.0	65.0	65.0	65.0	65.0	72.5	72.4	72.7	70.7	68.5
33	65.0	65.0	65.0	65.0	65.0	71.8	71.8	71.0	67.8	66.3
34	65.0	65.0	65.0	65.0	65.0	69.4	71.0	70.1	66.6	65.2
35	65.0	65.0	65.0	65.0	65.0	67.5	69.4	68.7	65.7	65.0
36	65.0	65.0	65.0	65.0	65.0	66.0	68.0	65.2	65.3	65.0
37	65.0	65.0	65.0	65.0	65.0	65.0	65.9	66.1	65.0	65.0
38	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
39	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
40	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	75.4	81.2	87.9	86.5	84.1	85.3	87.6	87.1	81.2	79.0
D	84.2	90.2	96.3	95.2	93.4	93.2	95.1	95.0	86.8	84.7
OASPL	91.0	98.5	103.3	102.8	102.3	100.7	100.9	101.1	92.8	90.2
PNL	94.0	99.5	103.9	102.7	102.0	101.5	103.0	102.8	95.4	93.7
PNLT	94.0	99.5	103.9	102.7	102.0	101.5	103.0	102.8	95.4	93.7

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

# TABLE H-VI

## NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 35, 3 DEGREE APPROACH, CENTERLINE MIC. ( SOFT SITE )

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)  
(DB RE 20 MICRO PA)

BAND	-37.5	-31.0	-24.5	-18.0	-11.5	-5.0	0	1.0	1.5	8.0
17	81.2	84.1	83.9	82.8	87.0	86.6	88.6	87.5	89.5	89.2
18	80.9	84.4	80.2	79.2	81.5	93.3	87.9	93.6	81.9	85.9
19	83.5	86.5	82.7	81.6	86.3	88.8	85.6	88.0	87.9	81.8
20	86.6	87.0	81.5	83.8	87.2	91.2	92.7	96.3	96.2	73.2
21	87.0	84.9	76.8	83.0	85.9	80.3	97.3	99.5	99.2	68.3
22	86.6	83.7	68.9	83.8	83.7	80.9	96.0	97.7	96.8	74.0
23	83.9	83.8	69.8	78.8	75.6	82.3	90.9	91.4	90.4	80.8
24	78.7	82.5	70.5	71.9	68.5	89.9	90.0	95.3	94.9	81.6
25	74.2	77.7	71.7	65.1	77.9	87.0	93.5	93.4	92.1	79.3
26	77.5	78.0	70.4	68.5	84.3	80.5	88.2	89.5	88.7	73.3
27	73.3	75.1	66.8	72.0	81.7	82.6	87.8	85.0	83.8	74.5
28	73.0	70.2	65.1	74.0	74.8	79.9	83.4	82.3	81.7	71.2
29	67.1	67.9	65.0	73.2	73.4	81.1	82.4	81.7	80.8	72.6
30	65.1	57.3	65.0	65.8	77.4	79.3	80.8	79.0	78.0	70.5
31	65.0	65.2	65.0	65.7	71.9	77.7	77.8	76.9	76.1	68.7
32	65.0	65.0	65.0	66.2	71.5	76.2	76.0	74.9	74.6	70.1
33	65.0	65.0	65.0	65.0	69.5	74.1	73.4	72.5	71.8	65.9
34	65.0	65.0	65.0	65.0	66.7	72.0	72.4	71.6	70.7	65.2
35	65.0	65.0	65.0	65.0	65.0	67.9	69.4	67.9	67.7	65.0
36	65.0	65.0	65.0	65.0	65.0	66.7	67.7	66.4	66.3	65.0
37	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
38	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
39	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
40	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
A	81.0	81.4	73.6	80.1	85.2	90.2	93.7	94.4	93.4	81.4
D	88.8	88.9	82.3	86.0	90.5	95.1	99.7	100.8	100.1	87.3
OASPL	93.8	94.2	89.8	91.4	95.0	99.5	103.2	104.6	104.1	92.5
PNL	97.6	97.8	93.3	95.6	99.7	103.5	107.1	107.6	107.2	96.5
PNLT	97.6	97.8	93.3	95.6	101.3	103.5	107.1	107.6	107.2	96.5

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-III

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 2, 0 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	81.9	85.3	77.8	81.5	1.8
15	76.5	79.4	73.5	76.2	1.6
16	82.1	85.1	79.0	81.8	1.7
17	84.6	87.5	82.2	84.4	1.3
18	77.2	79.9	73.1	76.8	1.9
19	79.9	82.9	76.1	79.6	1.9
20	82.1	84.7	77.6	81.8	1.6
21	79.9	82.7	76.7	79.6	1.5
22	81.0	83.5	76.9	80.7	1.7
23	82.2	86.7	77.4	81.6	2.3
24	82.7	86.5	77.8	82.1	2.3
25	81.8	85.7	76.6	81.1	2.6
26	78.6	82.3	74.0	78.0	2.3
27	75.6	79.0	71.3	75.2	1.8
28	71.5	73.8	68.3	71.3	1.3
29	68.4	71.0	65.5	68.2	1.4
30	65.9	67.8	63.7	65.7	1.1
31	65.2	66.9	63.2	64.9	1.4
32	67.8	69.3	65.8	67.7	1.0
33	64.9	66.9	62.5	64.7	1.2
34	63.1	68.4	59.6	62.5	2.1
35	63.1	66.6	58.9	62.3	2.6
36	61.1	63.2	59.2	61.0	1.0
37	57.7	59.5	56.5	57.6	.8
38	55.5	56.6	55.0	55.4	.5
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	82.4	85.4	79.3	82.1	1.5
DBD	88.8	91.5	85.9	88.6	1.4
OASPL	92.1	94.1	89.8	91.9	1.1
PNL	96.1	98.5	93.2	95.9	1.3
PNLT	96.6	98.6	94.0	96.4	1.3

270°  
(Microphone Location  
Relative to Helicopter)

# TABLE H-VII

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 3, 45 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	91.2	93.1	88.2	91.0	1.4
15	81.4	83.5	78.5	81.3	1.3
16	86.7	88.0	83.8	86.6	1.3
17	83.3	87.4	79.0	82.5	2.6
18	79.8	83.9	75.5	79.3	2.1
19	84.5	87.6	82.3	84.3	1.3
20	84.7	88.1	81.5	84.4	1.7
21	85.9	87.3	83.4	85.8	1.0
22	85.4	89.2	81.1	85.1	1.7
23	86.5	88.8	83.5	86.3	1.5
24	85.9	88.5	82.5	85.7	1.6
25	85.4	89.9	81.4	84.8	2.2
26	82.2	87.6	79.1	81.5	2.3
27	79.4	84.1	76.1	79.0	1.9
28	76.6	79.8	73.5	76.4	1.5
29	74.1	75.9	71.8	73.9	1.1
30	71.7	74.4	69.4	71.5	1.3
31	69.7	72.4	67.8	69.5	1.2
32	71.0	73.4	68.4	70.8	1.2
33	69.0	70.8	67.2	68.9	1.1
34	66.2	68.4	64.3	66.1	1.2
35	63.7	65.9	61.9	63.6	1.1
36	62.4	65.1	60.2	62.2	1.1
37	59.4	62.1	57.2	59.2	1.3
38	56.7	59.3	55.1	56.5	1.2
39	55.0	55.4	55.0	55.0	.1
40	55.0	55.0	55.0	55.0	.0
DBA	86.4	89.6	84.3	86.2	1.3
DBD	92.6	95.2	90.4	92.4	1.2
OASPL	96.3	98.4	94.6	96.2	.9
PNL	99.6	102.3	97.7	99.4	1.2
PNLT	99.6	102.3	97.7	99.4	1.2

225°  
(Microphone Location  
Relative to Helicopter)



# TABLE H-VII

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 4, 90 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	92.0	96.3	86.9	90.9	3.0
15	79.1	82.0	73.9	78.6	2.2
16	84.6	87.7	74.0	83.6	3.5
17	84.1	83.7	76.7	82.1	3.9
18	83.8	86.7	77.8	83.4	2.1
19	85.4	88.1	83.0	85.2	1.2
20	85.6	87.4	83.2	85.3	1.4
21	87.1	90.2	82.3	86.7	1.9
22	88.6	93.5	85.1	88.1	2.0
23	89.0	92.2	85.5	88.7	1.6
24	89.6	94.9	85.7	88.9	2.3
25	89.0	93.6	83.5	88.2	2.5
26	85.6	90.2	80.3	85.0	2.2
27	82.5	86.5	78.5	82.0	2.0
28	78.9	84.4	74.5	78.2	2.2
29	74.9	79.6	71.5	74.4	1.9
30	72.9	77.9	68.1	72.3	2.2
31	71.2	74.6	67.1	70.8	1.9
32	71.2	74.0	68.2	70.9	1.7
33	69.3	72.6	66.3	69.0	1.7
34	66.7	69.2	63.1	66.5	1.4
35	64.6	67.9	61.6	64.3	1.4
36	61.7	63.8	58.8	61.6	.9
37	59.0	60.7	57.8	58.9	.7
38	56.1	57.0	55.2	56.1	.4
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	89.0	93.4	85.2	88.6	1.9
DBD	95.3	99.5	92.2	94.8	1.8
OASPL	98.4	101.7	96.2	98.1	1.5
PNL	102.0	105.6	99.2	101.6	1.7
PNLT	102.0	105.6	99.2	101.6	1.7

180°  
(Microphone Location  
Relative to Helicopter)

*TABLE H-VII*  
 5 FOOT HOVER TEST  
 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA  
 VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 5, 135 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
 (DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	92.8	94.4	91.7	92.8	.7
15	85.5	87.2	84.1	85.5	.8
16	91.1	92.6	89.4	91.0	.8
17	86.8	88.3	83.2	86.6	1.3
18	86.6	88.0	83.6	86.4	1.3
19	87.5	90.0	84.6	87.2	1.4
20	88.0	90.9	84.5	87.7	1.9
21	87.8	91.6	84.6	87.4	1.9
22	88.7	92.1	85.4	88.3	1.8
23	90.0	92.6	86.5	89.7	1.7
24	91.3	93.4	87.4	91.0	1.7
25	89.9	93.1	84.9	89.4	2.3
26	85.7	87.9	81.9	85.3	1.8
27	83.7	86.5	79.3	83.3	1.8
28	83.9	87.4	79.0	83.3	2.5
29	81.6	85.7	76.7	80.9	2.5
30	78.8	83.0	72.6	78.1	2.6
31	77.6	80.2	73.8	77.2	1.9
32	78.3	80.8	73.9	78.0	1.8
33	77.0	80.2	73.3	76.6	1.9
34	74.3	77.7	69.7	73.9	2.0
35	72.3	76.0	68.7	71.9	1.9
36	70.0	73.7	64.4	69.4	2.3
37	67.3	71.0	63.3	66.7	2.2
38	63.4	67.1	59.5	63.0	2.0
39	59.3	64.1	55.4	58.6	2.3
40	56.0	58.4	55.0	55.9	1.0
DBA	91.6	93.5	88.4	91.3	1.5
DBD	97.2	99.7	94.4	97.0	1.4
OASPL	100.1	101.5	98.1	100.0	1.0
PNL	105.0	106.7	101.9	104.8	1.3
PNLT	105.1	107.7	101.9	104.9	1.4

*135°  
 (Microphone Location  
 Relative to Helicopter)*

# TABLE H-III

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPEC RA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 6, 180 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	89.5	91.4	87.5	89.4	1.1
15	80.6	82.8	76.4	80.3	1.7
16	86.1	88.3	83.5	85.9	1.1
17	96.4	97.8	94.9	96.3	.7
18	87.5	90.3	82.3	86.9	2.5
19	89.5	92.5	85.6	89.2	1.7
20	90.0	91.9	87.8	89.9	1.0
21	86.8	88.8	82.4	86.4	1.8
22	87.3	90.0	82.1	86.8	2.2
23	88.2	92.1	81.9	87.1	3.0
24	89.9	94.2	85.5	89.0	2.7
25	88.3	92.1	84.1	87.7	2.3
26	83.7	87.3	80.0	83.3	1.9
27	81.4	84.4	75.7	80.9	2.2
28	78.6	83.3	74.8	78.1	2.0
29	74.8	80.2	71.5	74.1	2.3
30	71.9	75.8	67.1	71.5	2.1
31	70.1	74.2	66.9	69.6	2.0
32	69.9	74.0	66.9	69.5	1.8
33	67.6	70.4	65.2	67.3	1.4
34	64.5	66.6	62.1	64.4	1.1
35	62.5	64.7	60.6	62.3	1.1
36	60.2	62.6	58.3	60.0	1.1
37	57.9	60.2	56.4	57.8	1.0
38	55.2	56.1	55.0	55.2	.3
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	88.6	92.1	84.9	88.1	2.0
DBD	95.1	98.1	92.4	94.8	1.7
OASPL	100.0	101.5	98.8	99.9	.8
PNL	102.2	105.2	100.1	101.9	1.5
PNLT	102.2	105.2	100.1	101.9	1.5

90°  
(Microphone Location  
Relative to Helicopter)

# TABLE H-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 7, 225 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	91.7	93.3	90.4	91.6	.7
15	81.7	83.6	79.2	81.5	1.2
16	87.5	88.8	85.2	87.4	1.0
17	89.5	91.1	88.0	89.5	.9
18	91.4	92.7	89.8	91.3	.8
19	93.2	95.0	90.9	93.1	.8
20	93.2	95.9	90.8	93.0	1.1
21	92.4	94.8	90.9	92.3	.9
22	90.0	92.8	86.4	89.8	1.5
23	88.8	91.7	83.5	88.5	1.8
24	87.9	90.5	82.8	87.6	1.7
25	85.9	88.9	80.4	85.5	1.9
26	84.6	86.9	78.5	84.3	1.9
27	81.7	85.2	75.0	81.2	2.3
28	78.4	81.6	73.6	78.0	2.0
29	75.6	78.0	71.3	75.3	1.6
30	72.0	76.6	68.5	71.6	1.8
31	70.6	74.5	67.8	70.3	1.5
32	71.6	75.8	68.9	71.3	1.5
33	70.4	73.3	67.2	70.3	1.2
34	69.8	73.2	65.4	69.4	1.9
35	67.9	70.0	64.8	67.7	1.4
36	66.3	68.9	63.8	66.1	1.4
37	64.9	67.5	63.0	64.7	1.3
38	60.7	62.4	59.1	60.6	.9
39	56.9	58.7	55.4	56.8	.9
40	55.0	55.0	55.0	55.0	.0
DBA	88.7	90.8	85.0	88.5	1.3
DBD	96.0	98.4	93.8	95.9	1.0
OASPL	101.0	103.0	100.1	100.9	.7
PNL	103.0	105.3	101.3	102.9	.9
PNLT	103.0	105.3	101.3	102.9	.9

45°  
(Microphone Location  
Relative to Helicopter)

# TABLE H-VII

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 8, 270 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	97.2	97.9	96.4	97.2	.4
15	85.5	86.7	84.0	85.4	.8
16	90.9	92.0	89.5	90.8	.7
17	81.3	85.0	75.0	80.4	2.8
18	83.7	85.7	79.8	83.5	1.2
19	86.1	88.0	83.2	85.9	1.1
20	88.4	89.9	86.2	88.3	.7
21	87.3	89.3	85.4	87.2	1.1
22	86.8	88.6	84.8	86.7	.9
23	87.2	90.1	81.9	86.7	2.2
24	88.3	92.7	80.3	87.2	3.3
25	87.9	93.4	79.4	86.5	3.5
26	84.9	90.3	77.4	83.9	3.1
27	82.4	87.1	77.4	81.4	2.8
28	80.3	84.6	74.6	79.6	2.5
29	77.6	81.5	71.9	77.0	2.4
30	75.0	79.2	69.2	74.1	2.9
31	73.0	76.0	68.4	72.6	2.0
32	73.1	76.5	70.0	72.9	1.5
33	71.7	75.7	68.3	71.3	1.9
34	68.9	72.6	65.9	68.5	1.9
35	67.3	72.2	63.7	66.7	2.1
36	65.7	69.9	62.9	65.3	1.5
37	64.9	68.2	62.0	64.7	1.3
38	60.8	63.5	58.6	60.6	1.1
39	56.4	58.8	55.0	56.3	.9
40	55.0	55.0	55.0	55.0	.0
DBA	89.1	92.3	84.2	88.6	2.1
DBD	94.9	97.9	91.0	94.5	1.7
OASPL	99.5	101.2	97.8	99.4	.9
PNL	102.1	105.2	97.9	101.7	1.8
PNLT	102.1	105.2	97.9	101.8	1.7

0°  
(Microphone Location  
Relative to Helicopter)

TABLE H-VII  
5 FOOT HOVER TEST  
1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 9, 315 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	84.5	86.0	81.1	84.4	1.2
15	81.0	82.2	79.2	80.9	.9
16	87.4	88.4	85.4	87.3	.8
17	87.6	89.0	86.5	87.5	.6
18	82.6	85.4	79.4	82.3	1.5
19	85.7	88.2	82.9	85.4	1.3
20	84.4	86.9	81.8	84.2	1.5
21	84.6	87.2	81.1	84.3	1.7
22	83.8	87.0	80.0	83.3	2.1
23	84.2	86.9	81.1	83.9	1.7
24	85.3	87.4	81.8	85.0	1.8
25	84.3	87.2	80.8	84.0	1.8
26	81.1	83.5	77.5	80.8	1.5
27	78.7	81.7	74.8	78.5	1.5
28	74.2	76.7	70.1	73.9	1.8
29	68.4	70.9	64.7	68.0	1.7
30	64.8	67.9	61.1	64.4	1.3
31	64.9	68.0	60.7	64.5	2.0
32	67.2	70.2	63.3	66.9	1.9
33	65.6	68.3	61.5	65.2	1.9
34	62.8	64.8	59.3	62.5	1.5
35	61.6	63.5	58.3	61.6	1.4
36	63.9	65.8	61.0	63.6	1.5
37	60.8	62.1	58.9	60.7	1.0
38	58.2	59.9	56.1	58.0	1.1
39	55.1	55.7	55.0	55.1	.2
40	55.0	55.0	55.0	55.0	.0
DBA	84.9	87.0	81.8	84.6	1.6
DBD	91.2	93.3	88.5	91.0	1.5
OASPL	95.4	97.0	93.8	95.3	1.0
PNL	98.5	100.4	95.8	98.3	1.4
PNLT	98.9	101.0	95.8	98.7	1.6

315°  
(Microphone Location  
Relative to Helicopter)

**TABLE H-VII**  
**5 FOOT HOVER TEST**  
**1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA**

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 10, 0 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	87.3	90.6	78.1	86.0	3.8
15	76.7	80.8	68.8	75.7	3.2
16	82.7	87.1	74.3	81.5	3.5
17	84.1	86.7	78.5	83.6	2.2
18	79.8	84.5	73.6	78.4	3.3
19	80.9	86.0	73.5	79.3	3.7
20	80.9	85.9	70.8	79.3	4.2
21	80.7	85.7	73.4	79.3	3.7
22	80.7	85.3	74.4	79.7	3.1
23	82.0	85.7	75.8	81.2	2.7
24	83.4	87.5	76.6	82.5	2.8
25	83.2	87.2	75.2	82.2	3.2
26	78.5	81.4	71.6	78.0	2.4
27	75.3	78.6	70.1	74.8	2.1
28	71.3	75.1	67.3	70.7	2.3
29	67.7	71.2	62.8	67.0	2.6
30	66.4	69.7	61.1	65.8	2.5
31	64.9	67.2	60.8	64.4	2.0
32	65.6	68.2	62.5	65.3	1.7
33	63.5	66.6	59.6	63.1	2.0
34	60.6	63.8	56.5	60.2	2.0
35	59.0	62.1	56.2	58.6	1.8
36	58.6	61.0	56.1	58.3	1.4
37	56.0	57.9	55.0	56.0	.9
38	55.1	55.5	55.0	55.1	.1
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	82.5	85.9	77.5	82.0	2.3
DBD	88.9	92.2	83.8	88.3	2.4
OASPL	92.9	95.8	88.3	92.4	2.1
PNL	96.1	99.4	91.8	95.6	2.2
PNLT	96.1	99.4	91.8	95.6	2.2

*270°*  
*(Microphone Location  
Relative to Helicopter)*

# TABLE H-VIII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 2, 0 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	84.8	86.0	82.8	84.8	.8
15	75.0	77.1	73.2	75.0	.9
16	82.5	84.4	80.8	82.4	.9
17	91.4	92.5	90.5	91.4	.6
18	93.0	93.9	92.2	93.0	.4
19	90.3	91.5	88.6	90.2	.7
20	88.7	90.8	86.1	88.6	1.0
21	88.3	90.8	86.8	88.3	.8
22	89.0	91.7	87.1	88.9	1.1
23	88.0	89.6	85.0	87.9	1.1
24	86.3	88.6	82.9	86.1	1.4
25	85.5	87.9	82.6	85.3	1.3
26	83.3	86.8	81.0	83.1	1.3
27	80.0	82.6	76.9	79.8	1.5
28	78.7	81.9	73.9	78.3	1.9
29	75.5	78.1	72.5	75.3	1.3
30	72.8	74.1	70.2	72.7	.9
31	71.0	72.1	68.7	71.0	.8
32	70.9	72.0	69.6	70.9	.6
33	68.1	70.0	65.8	68.0	1.2
34	67.2	70.0	64.2	66.9	1.6
35	65.2	67.4	61.8	65.0	1.3
36	62.6	64.8	59.8	62.4	1.2
37	60.7	62.5	58.7	60.6	1.0
38	57.4	59.4	55.8	57.3	.9
39	55.1	55.4	55.0	55.1	.1
40	55.0	55.0	55.0	55.0	.0
DBA	87.3	89.6	85.8	87.2	.9
DBD	93.8	95.9	92.7	93.8	.8
OASPL	98.6	99.9	97.7	98.6	.5
PNL	101.5	103.1	100.2	101.4	.7
PNLT	101.5	103.1	100.2	101.4	.7

90°  
(Microphone Location  
Relative to Helicopter)



*TABLE H-VII*  
5 FOOT HOVER TEST  
1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 3, 45 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	88.3	89.7	86.5	88.3	.8
15	77.3	78.8	75.0	77.2	1.0
16	83.5	85.6	80.7	83.3	1.3
17	85.9	90.0	81.7	85.5	1.9
18	87.0	88.9	85.3	86.9	1.0
19	90.4	92.2	88.5	90.3	.9
20	89.3	91.2	87.1	89.2	1.2
21	91.1	93.5	86.7	90.6	2.1
22	38.7	92.5	84.1	88.2	2.1
23	87.9	91.8	83.3	87.2	2.4
24	87.4	90.9	82.5	86.8	2.3
25	85.8	90.8	81.1	85.1	2.2
26	84.3	89.0	80.9	83.7	2.1
27	81.1	84.0	77.9	80.8	1.5
28	78.5	82.6	75.6	78.1	1.7
29	76.3	81.1	71.2	75.7	2.2
30	72.7	78.7	66.7	71.5	3.1
31	72.0	78.6	64.9	70.4	3.7
32	72.2	77.5	65.0	71.1	3.3
33	69.6	74.8	62.7	68.6	2.9
34	69.9	75.1	62.5	68.8	3.2
35	66.6	69.7	60.2	65.8	2.8
36	65.8	71.7	60.1	64.7	3.0
37	63.4	66.0	58.5	62.9	2.3
38	59.4	62.4	55.2	58.8	2.2
39	55.6	57.1	55.0	55.5	.6
40	55.0	55.0	55.0	55.0	.0
DBA	87.8	91.7	84.4	87.4	1.8
DBD	94.5	98.1	91.0	94.1	1.8
OASPL	98.4	101.0	95.7	98.1	1.5
PNL	101.9	105.4	98.2	101.5	2.0
PNLT	102.2	106.7	98.2	101.6	2.2

45°  
(Microphone Location  
Relative to Helicopter)

TABLE H-VIII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 4, 90 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	92.4	93.8	91.3	92.4	.8
15	83.0	85.4	73.4	81.5	4.3
16	89.4	91.8	77.1	87.6	5.1
17	84.0	87.7	75.0	82.3	4.3
18	81.0	85.3	74.3	80.2	2.6
19	84.4	87.3	81.3	84.1	1.7
20	85.6	88.3	83.4	85.3	1.5
21	85.4	88.9	80.9	84.8	2.5
22	87.2	89.9	82.0	86.6	2.4
23	88.5	92.3	81.7	87.5	3.2
24	88.5	91.9	81.8	87.8	2.8
25	86.8	89.7	78.2	86.0	2.9
26	85.5	89.1	76.1	84.6	3.2
27	80.0	84.3	71.4	79.2	3.1
28	74.6	76.8	68.5	74.1	2.1
29	73.2	76.4	66.9	72.5	2.7
30	71.3	75.7	63.8	70.5	2.8
31	69.4	72.5	62.9	68.7	2.6
32	68.8	71.1	63.9	68.4	1.8
33	64.9	67.5	59.8	64.5	2.3
34	63.8	66.7	58.9	63.3	2.2
35	62.1	64.3	57.6	61.6	2.2
36	61.5	64.0	57.7	61.1	1.9
37	62.4	66.1	56.9	61.5	3.0
38	58.3	61.2	55.1	57.9	1.9
39	55.2	56.3	55.0	55.2	.4
40	55.0	55.0	55.0	55.0	.0
DBA	87.5	90.4	80.5	87.0	2.5
DBD	93.8	96.6	87.9	93.3	2.3
OASPL	97.4	99.7	94.7	97.1	1.3
PNL	100.6	102.9	95.3	100.2	2.0
PNLT	100.9	104.0	95.6	100.5	1.9

0°  
(Microphone Location  
Relative to Helicopter)

# TABLE H-VIII

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 5, 135 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	84.6	87.8	79.7	84.3	1.8
15	81.6	83.4	79.2	81.5	1.0
16	88.6	90.0	86.9	88.5	.8
17	85.2	87.7	83.0	85.1	1.2
18	82.5	88.2	77.7	81.5	2.7
19	82.8	85.1	79.1	82.5	1.8
20	83.2	87.4	78.2	82.8	1.9
21	83.7	86.1	81.1	83.5	1.3
22	83.0	85.1	78.1	82.7	1.8
23	85.0	89.6	81.0	84.5	2.0
24	85.5	88.6	82.1	85.1	1.9
25	84.5	87.4	81.1	84.1	1.8
26	82.3	85.6	78.6	81.9	1.8
27	77.7	81.3	75.1	77.4	1.7
28	74.6	78.5	71.5	74.2	1.8
29	71.1	73.0	68.7	70.8	1.4
30	69.0	71.9	66.1	68.8	1.5
31	67.3	69.9	64.2	67.1	1.4
32	67.8	70.7	65.5	67.5	1.4
33	64.8	69.4	61.2	64.2	2.1
34	63.5	66.6	60.2	63.1	1.8
35	62.2	64.8	59.5	62.0	1.6
36	64.8	67.2	62.0	64.5	1.6
37	60.9	63.4	58.8	60.7	1.3
38	58.1	60.4	56.4	58.0	1.1
39	55.1	55.7	55.0	55.1	.2
40	55.0	55.0	55.0	55.0	.0
DBA	85.0	87.6	82.6	84.7	1.5
DBD	91.2	93.6	88.8	91.0	1.3
OASPL	94.6	96.5	93.2	94.6	.8
PNL	98.6	100.8	96.6	98.4	1.2
PNLT	99.4	102.3	96.7	99.2	1.4

315°

(Microphone Location  
Relative to Helicopter)

# TABLE H-VII

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 6, 180 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	92.3	93.9	91.3	92.2	.6
15	83.0	84.3	80.9	83.0	.7
16	89.3	90.7	87.7	89.3	.7
17	83.4	86.9	78.0	82.7	2.6
18	85.9	89.5	80.6	85.2	2.5
19	86.4	90.4	82.6	85.7	2.4
20	85.7	89.6	80.5	85.1	2.4
21	84.8	87.4	82.0	84.5	1.7
22	82.4	83.9	80.0	82.3	1.0
23	83.2	85.6	78.8	82.9	1.5
24	83.6	85.6	80.6	83.3	1.8
25	81.9	84.8	77.8	81.4	2.0
26	80.6	84.2	76.2	80.0	2.3
27	77.6	80.7	73.5	77.2	2.0
28	75.7	79.1	70.8	75.3	2.0
29	72.7	75.9	69.1	72.4	1.6
30	70.1	72.4	67.3	69.8	1.5
31	67.9	70.0	65.5	67.7	1.3
32	69.0	70.8	66.7	68.9	1.2
33	65.1	66.6	63.0	65.0	1.1
34	64.0	65.7	61.7	63.9	1.0
35	61.5	63.5	59.3	61.4	.9
36	61.3	63.2	59.5	61.2	.8
37	58.2	59.6	56.5	58.1	.8
38	55.7	56.5	55.0	55.7	.4
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	84.0	86.3	81.2	83.8	1.3
DBD	90.4	91.8	88.1	90.3	.9
OASPL	95.7	96.9	94.2	95.6	.7
PNL	97.9	99.7	95.3	97.8	.9
PNLT	98.1	99.9	96.4	98.0	.9

270°

(Microphone Location  
Relative to Helicopter)

# TABLE H-VII

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERIOL CH-47 C

OCTOBER 13 1976

EVENT 7, 225 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	92.2	93.3	91.3	92.2	.5
15	78.9	80.4	76.2	78.8	1.3
16	85.5	87.0	82.3	85.3	1.5
17	78.6	84.0	73.1	77.8	2.6
18	81.9	83.9	79.8	81.8	1.0
19	87.6	89.8	85.7	87.5	1.1
20	84.4	86.3	81.6	84.2	1.3
21	86.5	88.2	84.9	86.4	.8
22	85.5	87.8	82.6	85.4	1.3
23	86.8	88.9	83.2	86.5	1.5
24	87.4	90.1	84.1	87.2	1.4
25	85.9	89.7	81.6	85.6	1.6
26	84.5	87.6	80.8	84.2	1.4
27	80.6	83.2	77.6	80.4	1.4
28	78.9	81.5	76.5	78.8	1.0
29	76.7	78.0	75.2	76.6	.9
30	72.9	74.9	70.8	72.8	1.1
31	70.4	72.3	67.0	70.2	1.2
32	70.8	72.5	65.0	70.5	1.6
33	68.4	70.5	62.8	68.2	1.6
34	66.7	67.8	62.6	66.5	1.1
35	62.9	64.5	59.8	62.8	1.0
36	61.1	62.2	58.8	61.1	.8
37	57.8	58.6	55.7	57.8	.6
38	55.3	55.7	55.0	55.3	.2
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	87.3	89.6	85.1	87.2	1.0
DBD	93.2	95.6	91.0	93.1	1.0
OASPL	96.7	98.3	95.0	96.6	.7
PNL	100.4	102.5	98.0	100.3	.9
PNLT	100.4	102.5	98.0	100.3	.9

225°  
(Microphone Location  
Relative to Helicopter)

TABLE II-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 8, 270 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	90.3	91.3	87.7	90.1	1.2
15	82.3	84.3	80.9	82.1	1.0
16	88.9	91.1	87.5	88.8	.9
17	78.2	81.8	74.3	77.7	2.1
18	84.5	87.7	81.7	84.2	1.5
19	83.7	88.0	78.9	83.1	2.2
20	84.2	85.8	80.2	83.9	1.6
21	84.2	86.3	81.4	84.0	1.3
22	83.7	85.7	81.3	83.5	1.4
23	85.7	88.4	81.9	85.2	2.0
24	86.2	89.3	82.7	85.8	1.8
25	85.5	88.8	80.5	85.0	2.0
26	83.1	87.0	79.3	82.7	1.8
27	79.9	83.3	77.0	79.6	1.6
28	77.2	80.5	74.2	76.8	1.7
29	74.7	77.3	71.3	74.2	1.9
30	70.9	74.8	66.6	70.4	2.0
31	68.2	72.2	62.9	67.8	2.0
32	67.9	71.9	64.1	67.4	2.0
33	64.8	68.2	60.7	64.3	2.1
34	63.4	66.4	59.2	63.0	1.9
35	60.6	63.3	57.0	60.3	1.7
36	58.5	61.4	56.0	58.3	1.3
37	56.0	57.0	55.0	55.9	.7
38	55.0	55.2	55.0	55.0	.1
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	86.0	88.7	83.3	85.8	1.5
DBD	91.9	94.5	89.7	91.7	1.3
OASPL	95.6	97.7	94.1	95.5	1.1
PNL	99.0	101.5	97.1	98.8	1.2
PNLT	99.0	101.5	97.1	98.8	1.2

180°  
(Microphone Location  
Relative to Helicopter)

# TABLE H-VII

## 5 FOOT HOVER TEST

### 1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERIOL CH-47 C

OCTOBER 13, 1976

EVENT 9, 315 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	89.8	90.8	88.0	89.7	.7
15	81.2	82.6	78.9	81.1	.8
16	88.0	89.1	86.2	88.0	.8
17	80.0	82.7	75.5	79.7	1.8
18	82.8	86.7	76.8	82.2	2.4
19	86.4	89.7	80.3	86.1	1.9
20	86.8	89.9	82.2	86.4	1.8
21	87.0	89.9	82.5	86.6	2.1
22	87.2	90.7	82.8	86.7	2.1
23	86.9	90.6	83.3	86.5	1.8
24	86.4	89.2	82.6	85.9	2.1
25	84.5	89.0	78.8	83.7	2.7
26	83.5	88.5	77.8	82.5	2.9
27	80.5	84.3	75.2	79.8	2.6
28	79.5	83.0	73.6	78.6	2.9
29	77.6	82.6	72.5	76.8	2.6
30	75.6	79.0	70.6	75.0	2.4
31	74.0	77.0	70.3	73.5	2.0
32	72.3	74.8	69.1	72.1	1.5
33	69.7	72.5	66.3	69.4	1.6
34	68.7	71.4	65.6	68.4	1.6
35	65.1	67.5	61.9	64.8	1.4
36	63.0	64.6	60.2	62.8	1.4
37	60.4	63.2	58.0	60.2	1.4
38	56.4	59.0	55.2	56.3	1.0
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	87.5	90.2	83.6	87.1	2.0
DBD	93.2	95.8	89.7	92.9	1.7
OASPL	96.7	99.1	94.6	96.5	1.3
PNL	100.7	103.3	97.5	100.4	1.7
PNLT	100.8	103.3	97.5	100.5	1.7

135°  
(Microphone Location  
Relative to Helicopter)

# TABLE H-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 10, 0 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	87.5	89.1	84.5	87.4	1.1
15	74.4	76.6	70.8	74.2	1.4
16	83.1	85.1	80.9	82.9	1.3
17	95.1	96.6	91.5	94.9	1.6
18	92.3	94.7	87.6	91.9	1.8
19	90.4	92.2	88.2	90.3	1.0
20	90.4	92.6	86.2	90.1	1.8
21	90.1	91.8	86.8	89.9	1.4
22	89.4	91.7	84.4	89.0	1.9
23	90.8	93.2	86.3	90.4	2.1
24	90.2	93.6	85.4	89.4	2.7
25	88.3	91.8	83.0	87.6	2.5
26	85.5	88.5	81.3	85.1	1.9
27	82.3	86.1	78.8	81.8	2.0
28	81.5	84.1	78.5	81.1	1.8
29	79.2	81.9	76.6	78.9	1.5
30	76.3	79.3	73.4	75.9	1.8
31	73.8	76.2	70.8	73.6	1.3
32	73.2	75.1	69.8	73.0	1.3
33	70.8	72.8	67.0	70.5	1.6
34	69.6	72.9	65.7	69.2	1.8
35	67.1	69.3	63.1	66.8	1.6
36	65.0	67.5	61.6	64.7	1.5
37	62.8	64.8	60.5	62.6	1.2
38	59.1	60.8	55.9	58.9	1.3
39	55.5	56.6	55.0	55.4	.5
40	55.0	55.0	55.0	55.0	.0
DBA	90.0	92.3	87.0	89.7	1.7
DBD	96.2	98.3	93.5	95.9	1.6
OASPL	100.4	102.0	98.3	100.3	1.2
PNL	103.9	106.0	100.9	103.7	1.4
PNLT	103.9	106.0	100.9	103.7	1.4

90°  
(Microphone Location  
Relative to Helicopter)



# TABLE H-VII

500 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 15, 180 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	87.3	90.4	83.7	86.8	2.2
15	79.7	81.5	77.2	79.6	1.3
16	85.3	87.0	82.8	85.2	1.2
17	90.7	91.8	88.1	90.6	1.0
18	87.9	90.0	83.6	87.3	2.5
19	90.6	92.3	88.0	90.4	1.6
20	85.5	87.1	83.2	85.2	1.4
21	80.3	82.5	77.3	80.2	1.2
22	89.8	91.4	86.7	89.6	1.5
23	95.1	97.2	91.5	94.8	1.7
24	96.0	98.7	92.0	95.7	1.8
25	90.3	93.6	85.9	89.8	2.1
26	88.7	91.4	82.8	88.1	2.5
27	91.5	95.3	85.4	90.7	2.8
28	85.6	88.8	77.9	84.6	3.1
29	85.7	89.7	79.8	84.9	2.8
30	84.4	88.5	77.1	83.5	2.8
31	81.7	84.8	74.8	80.9	2.8
32	80.2	83.3	74.3	79.6	2.5
33	78.5	82.1	70.6	77.7	2.8
34	75.8	79.2	67.6	75.2	2.5
35	74.3	77.4	65.8	73.5	2.8
36	72.4	75.9	63.4	71.4	3.2
37	69.3	73.8	61.5	68.0	3.5
38	65.7	71.4	56.8	63.7	4.1
39	62.0	67.6	55.0	60.1	4.1
40	58.7	64.6	55.0	57.6	2.9
DBA	95.1	97.9	90.0	94.6	2.1
DBD	100.2	102.8	95.7	99.9	1.9
OASPL	102.3	104.5	98.7	101.9	1.8
PNL	108.2	111.1	103.3	107.8	2.1
PNLT	108.2	111.1	103.3	107.8	2.1

90°  
(Microphone Location  
Relative To Helicopter)

# TABLE H-VII

500 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VENTOL CH-47 C

OCTOBER 13, 1976

EVENT 15, 180 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	81.3	85.1	72.6	80.2	3.3
15	80.3	82.5	77.6	80.1	1.6
16	86.9	88.7	85.0	86.8	1.2
17	77.5	80.2	72.9	77.1	1.7
18	83.6	86.2	81.4	83.4	1.3
19	80.1	81.9	77.0	79.9	1.4
20	73.1	76.3	69.7	72.8	1.7
21	73.0	75.2	71.1	72.9	1.0
22	81.0	85.3	78.4	80.6	1.7
23	85.5	90.5	82.3	85.0	2.0
24	86.2	92.1	81.0	85.5	2.3
25	80.1	86.0	72.8	79.2	2.9
26	81.3	86.6	77.2	80.8	1.9
27	82.1	86.9	75.6	81.6	2.3
28	80.1	82.9	74.6	79.7	2.1
29	78.8	81.2	73.3	78.5	1.9
30	77.3	78.9	71.8	77.0	1.8
31	75.6	77.6	70.6	75.3	1.8
32	73.6	75.1	71.3	73.4	1.0
33	70.3	71.8	67.8	70.2	1.0
34	67.5	68.9	66.4	67.5	.6
35	63.7	65.1	62.2	63.7	.8
36	61.9	63.9	59.9	61.7	1.2
37	58.3	60.0	56.6	58.2	.9
38	55.1	55.7	55.0	55.1	.2
39	55.0	55.0	55.0	55.0	.0
40	55.0	55.0	55.0	55.0	.0
DBA	87.2	91.3	82.5	86.8	1.7
DBD	91.6	95.7	88.1	91.3	1.5
OASPL	93.6	97.4	90.8	93.3	1.4
PNL	99.0	103.0	95.9	98.8	1.4
PNLT	99.0	103.0	95.9	98.8	1.4

270°  
(Microphone Location  
Relative to Helicopter)

# TABLE H-VII

500 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 15, 0 DEGREES, CENTERLINE MICROPHONE ( HARD SITE )

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	98.0	98.8	96.2	98.0	.9
15	79.7	81.0	78.2	79.6	.7
16	84.2	86.1	82.5	84.1	.9
17	77.7	81.7	69.9	76.9	2.8
18	78.8	81.1	75.9	78.6	1.5
19	71.9	74.1	67.9	71.4	2.0
20	82.5	85.2	75.0	81.7	2.9
21	83.5	86.6	76.4	82.9	2.5
22	83.2	86.5	78.9	82.7	2.1
23	80.1	84.5	76.6	79.6	1.9
24	77.8	82.0	73.5	77.3	2.2
25	80.8	83.7	76.8	80.5	1.7
26	77.0	79.3	73.6	76.7	1.6
27	77.8	80.6	73.7	77.5	1.7
28	76.8	79.4	72.0	76.5	1.7
29	75.5	78.1	70.5	75.2	1.8
30	74.1	77.0	70.6	73.8	1.5
31	71.8	72.9	69.0	71.6	1.3
32	72.5	76.3	69.7	72.1	1.9
33	69.2	70.2	67.0	69.1	1.0
34	68.3	69.6	66.6	68.2	.9
35	65.9	66.9	65.0	65.8	.7
36	65.1	65.2	65.0	65.1	.2
37	65.0	65.0	65.0	65.0	.0
38	65.0	65.0	65.0	65.0	.0
39	65.0	65.0	65.0	65.0	.0
40	65.0	65.0	65.0	65.0	.0
DBA	83.8	85.5	80.0	83.6	1.3
DBD	90.0	92.1	86.8	89.8	1.2
OASPL	96.8	97.9	94.8	96.7	.9
PNL	97.6	99.3	94.7	97.4	1.1
PNLT	97.8	100.4	94.7	97.6	1.4

Helicopter Located  
Directly Overhead

*TABLE H-III*  
500 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 15, 0 DEGREES, CENTERLINE MICROPHONE ( SOFT SITE )

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)  
(DB RE 20 MICRO PA)

BAND	ENERGY AVERAGE	MAX	MIN	ARITH. AVERAGE	STD DEV
14	97.9	98.7	95.9	97.8	1.0
15	79.8	81.1	78.1	79.7	.9
16	83.5	85.4	82.0	83.4	1.0
17	79.0	82.2	72.4	78.4	2.6
18	80.0	83.3	76.1	79.6	1.8
19	70.9	73.8	65.2	70.0	2.8
20	81.1	84.2	74.3	80.1	3.1
21	83.7	88.1	78.4	82.9	2.7
22	82.8	86.6	79.1	82.4	1.9
23	80.4	84.8	76.8	79.9	2.0
24	78.3	83.0	72.1	77.5	2.7
25	81.5	85.7	76.0	81.0	2.1
26	77.2	79.3	73.2	76.9	1.7
27	78.3	80.9	74.9	78.1	1.4
28	77.3	79.4	72.8	77.1	1.7
29	75.6	77.5	71.0	75.3	1.8
30	74.2	76.1	70.1	73.9	1.6
31	71.6	72.6	68.4	71.4	1.3
32	72.4	74.8	63.9	72.0	1.7
33	68.3	69.8	66.3	68.2	1.0
34	66.7	68.3	65.1	66.5	1.0
35	65.2	65.5	65.0	65.2	.4
36	65.0	65.0	65.0	65.0	.1
37	65.0	65.0	65.0	65.0	.0
38	65.0	65.0	65.0	65.0	.0
39	65.0	65.0	65.0	65.0	.0
40	65.0	65.0	65.0	65.0	.0
DBA	84.0	86.4	80.8	83.8	1.5
DBD	89.4	92.1	86.7	89.2	1.4
OASPL	96.1	97.6	94.0	95.9	1.1
PNL	97.6	100.4	95.0	97.4	1.3
PNLT	98.0	101.4	95.2	97.8	1.5

( Helicopter Located  
Directly Overhead )

TABLE H-VIII  
Helicopter Noise Level Data  
VERTOL CH-47C OCTOBER 13, 1976

MAX RMS Noise Level - dBA re 20  $\mu$ P

HELICOPTER OPERATION	RUN NUMBER	MICROPHONE OFFSET TO THE WEST 150 M		MICROPHONE OFFSET TO THE EAST 150 M	
		CENTER LINE		CENTER LINE	
5 Ft. HOVER 0°	2 10	86.5 85.5 (270°)			91.0 (90°)
5 Ft. HOVER 45°	3	89.3 (225°)			92.0 (45°)
5 Ft. HOVER 90°	4	93.0 (180°)			99.0 (0°)
5 Ft. HOVER 135°	5	94.5 (135°)			90.8 (315°)
5 Ft. HOVER 180°	6	93.0 (90°)	NO DATA	NO DATA	86.0 (270°)
5 Ft. HOVER 225°	7	93.5 (45°)			89.3 (225°)
5 Ft. HOVER 270°	8	92.3 (0°)	NO DATA	NO DATA	93.0 (180°)
5 Ft. HOVER 315°	9	88.3 (315°)			92.0 (135°)
500 Ft HOVER	15	97.5			—
500 Ft HOVER	16	89.8			88.8

TABLE H-VIII  
Helicopter Noise Level Data  
VERTOL CH 47C

OCTOBER 13, 1976

max RMS Noise Level - dBA @ 20 m Pa						
HELICOPTER OPERATION	RUN NUMBER	MICROPHONE OFFSET TO THE WEST 150M CENTER LINE		MICROPHONE OFFSET TO THE EAST 150M CENTER LINE		
		OVER Existing Surface	OVER Plywood	OVER Existing Surface	OVER Existing Surface	
3° GLIDE SLOPE	32	89.0	92.8	92.5	88.5	
	34	88.3	99.0	99.0	85.5	
	35	89.5	96.5	95.0	85.0	
6° GLIDE SLOPE	12	90.8	97.3	96.8	88.3	
	13	86.3	98.0	99.0	88.0	
	14	87.8	97.0	96.0	87.3	
9° GLIDE SLOPE	19	85.5	96.0	95.8	88.3	
	20	88.8	96.0	95.8	85.0	
	21	90.0	96.8	96.5	85.3	
60 KT LEVEL FLYOVER	17	86.0	90.0	90.3	87.5	
	18	86.3	91.0	91.5	86.0	
100KT LEVEL FLYOVER	22	84.0	88.3	89.8	87.3	
	23	81.3	84.8	83.6	80.0	
126 KT LEVEL FLYOVER	30	85.5	89.5	90.3	87.0	
	31	87.9	89.8	88.0	90.0	

TABLE H-VIII  
Helicopter Noise Level Data

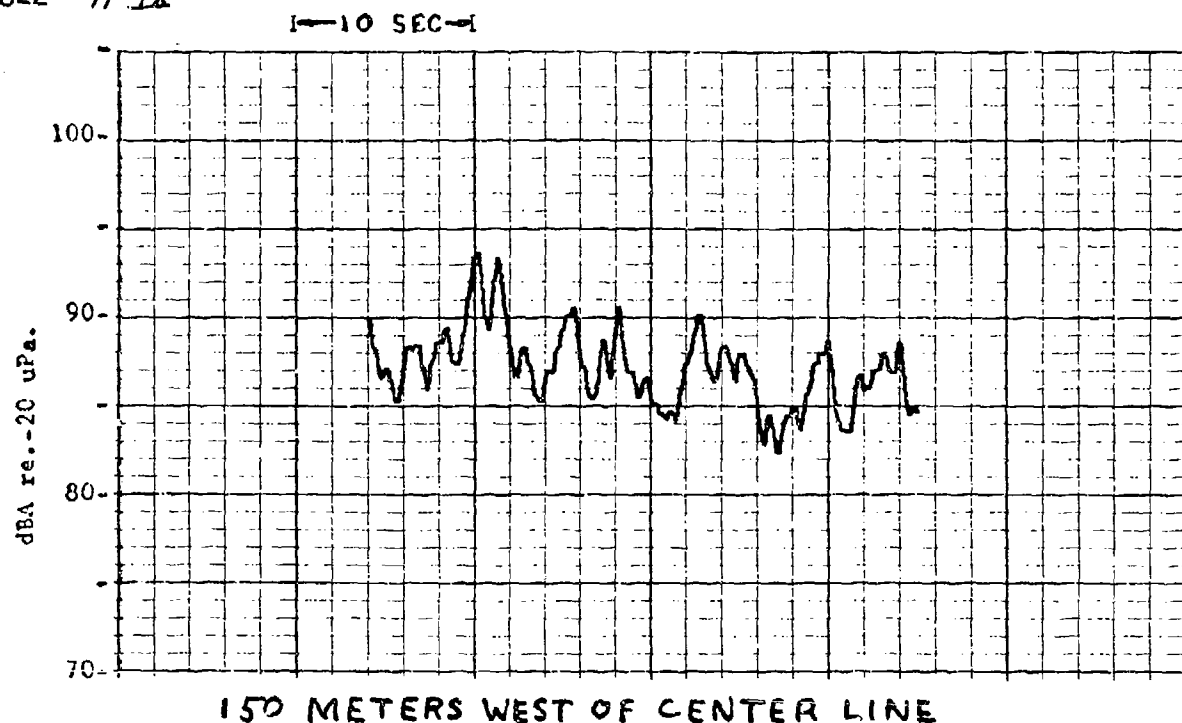
VERTOL CH 47 C

OCTOBER 13, 1976

MAX RMS Noise Level - dBA re 20  $\mu$ Pa

HELICOPTER OPERATION	RUN NUMBER	MICROPHONE OFFSET TO THE WEST		MICROPHONE OFFSET TO THE EAST	
		15CM	CENTER LINE	CENTER LINE	15CM
		OVER EXISTING Surface	OVER Plywood	OVER EXISTING Surface	OVER EXISTING Surface
141 KT LEVEL FLY OVER	24	90.0	91.3	91.5	90.0
	25	94.0	95.3	93.5	91.5
	26	92.3	94.9	94.0	95.0
	27	94.5	96.3	97.8	97.5
150 KT LEVEL FLY OVER	28	97.8	99.3	98.0	99.0
	29	98.0	98.5	99.3	98.5
LEVEL FLY OVER					
LEVEL FLY OVER					
LEVEL FLY OVER					
LEVEL FLY OVER					

TABLE H-IX



NO DATA

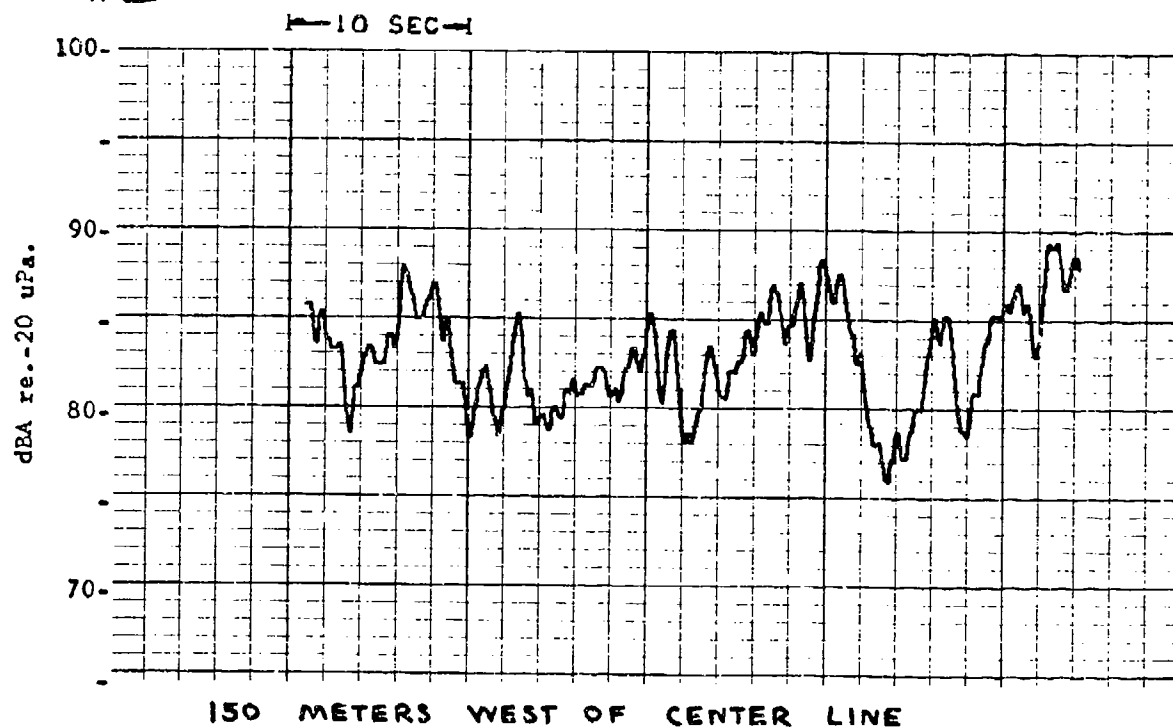
75 METERS WEST OF CENTER LINE

NOISE LEVEL TIME HISTORIES  
VERTOL CH-47C HELICOPTER  
90° HOVER 5 FT.

RUN 4



TABLE H-IX



NO DATA

75 METERS WEST OF CENTER LINE

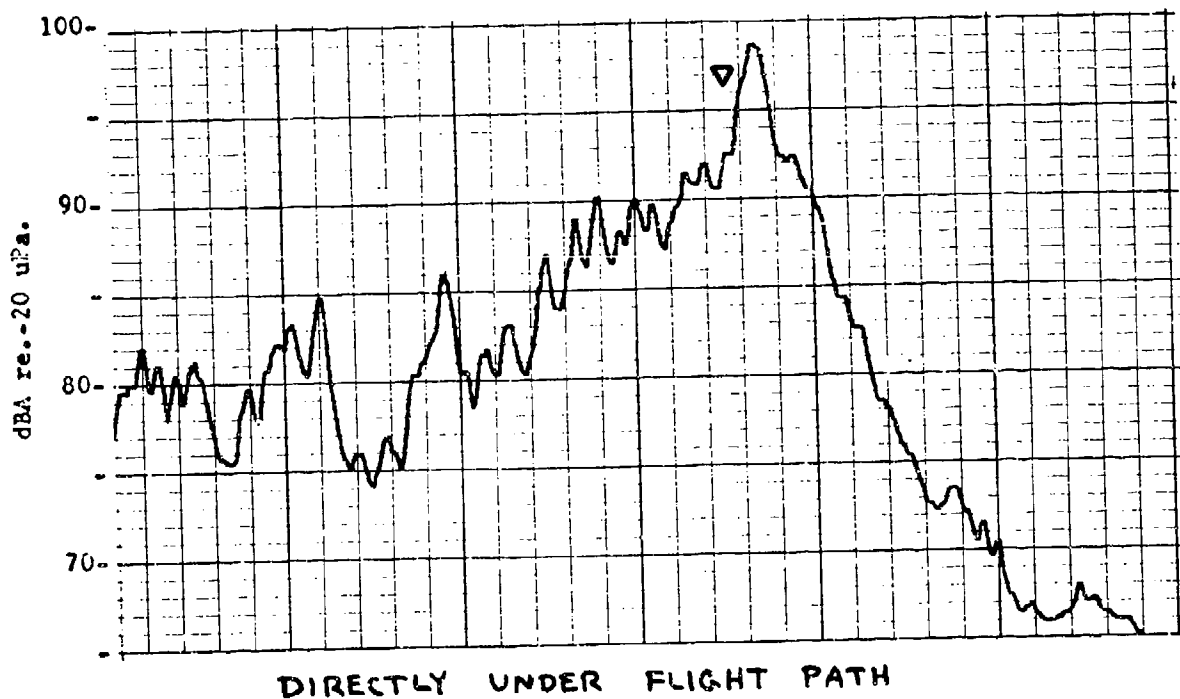
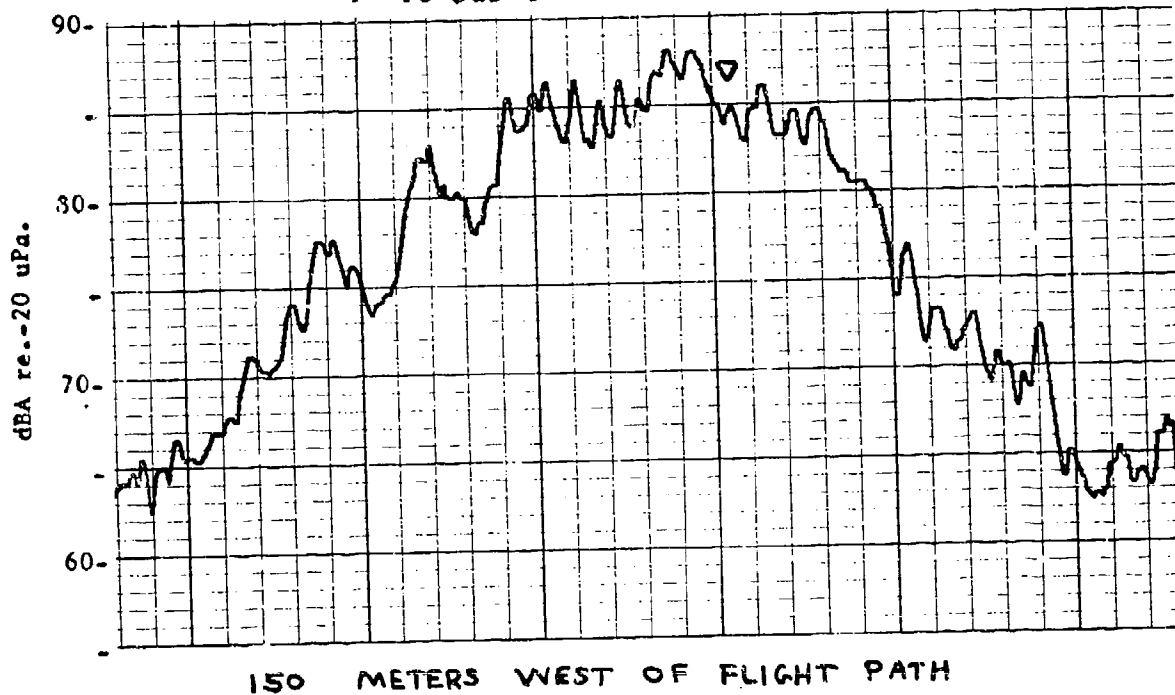
NOISE LEVEL TIME HISTORIES  
VERTOL CH-47C HELICOPTER  
180° HOVER - 5 FT.

RUN 6

TABLE H-IX

▽ = CENTER CROSSING

10 SEC



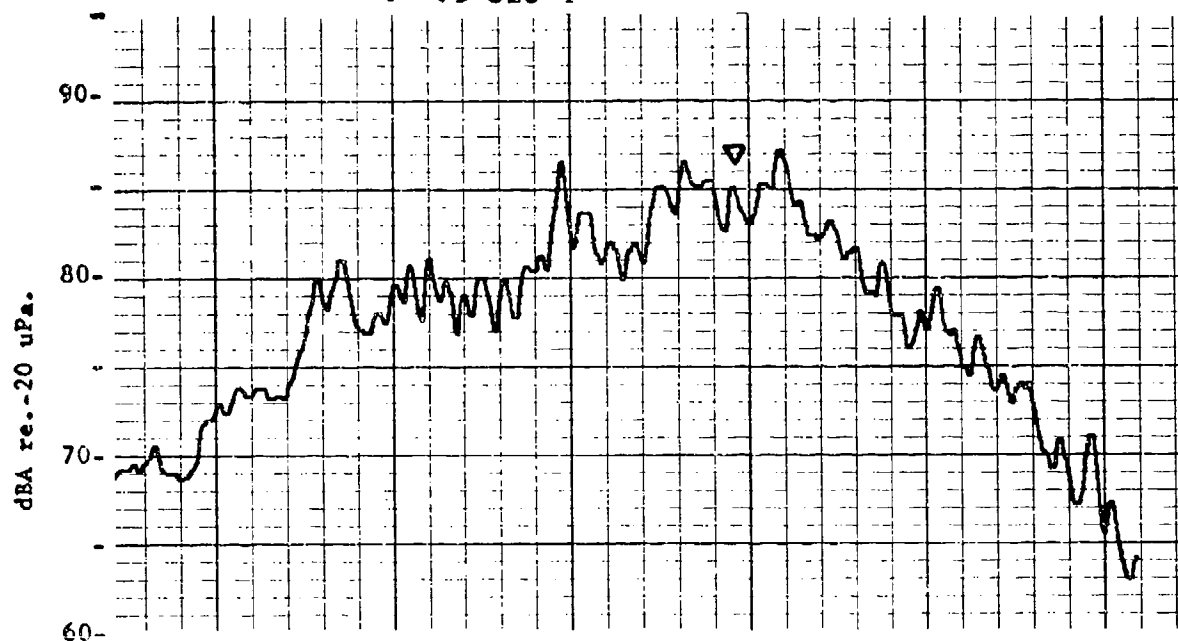
NOISE LEVEL TIME HISTORIES  
VERTOL CH-47C HELICOPTER  
3° APPROACH

RUN 34

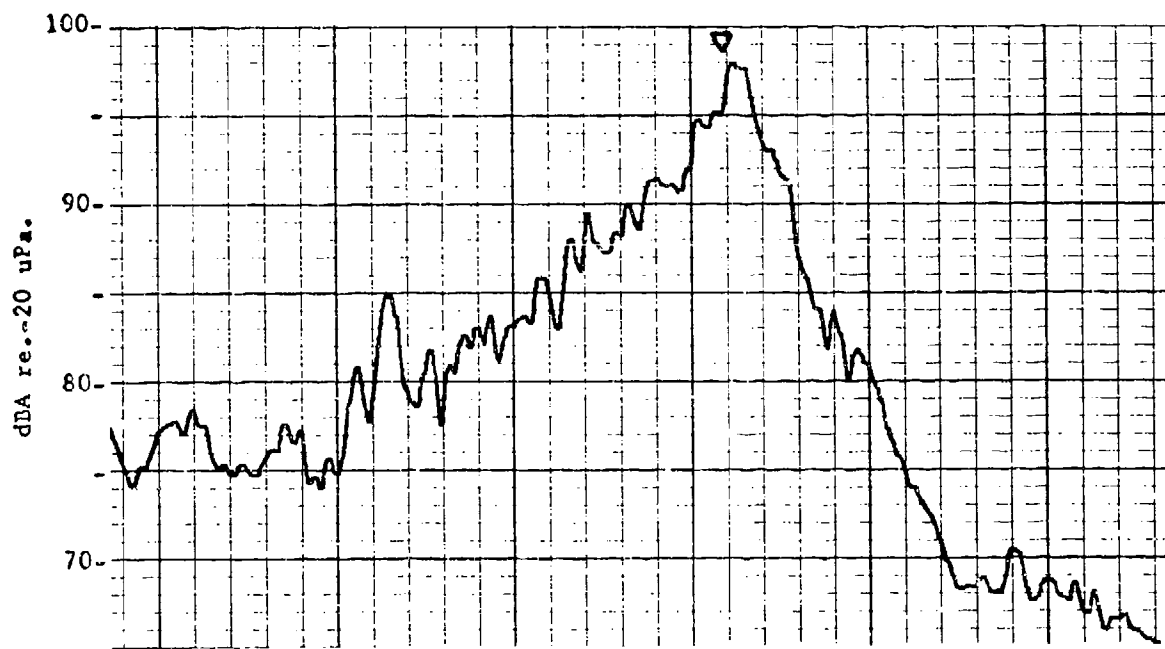
TABLE H-IX

▽ = CENTER CROSSING

← 10 SEC →



150 METERS WEST OF FLIGHT PATH



DIRECTLY UNDER FLIGHT PATH

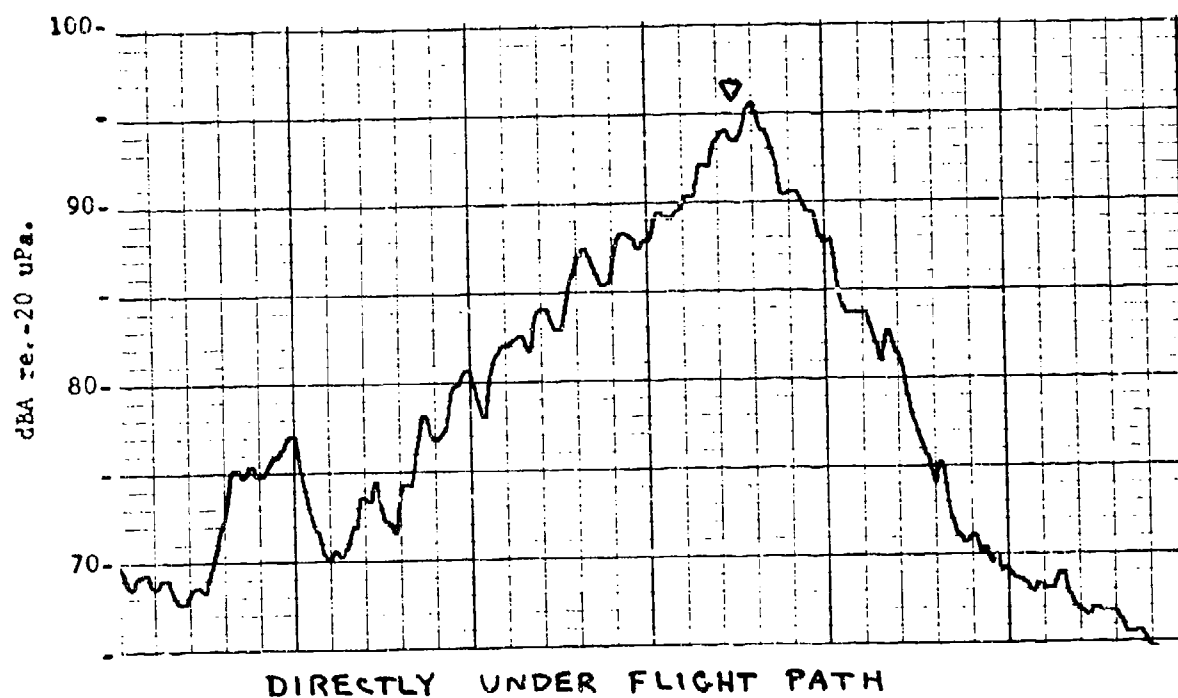
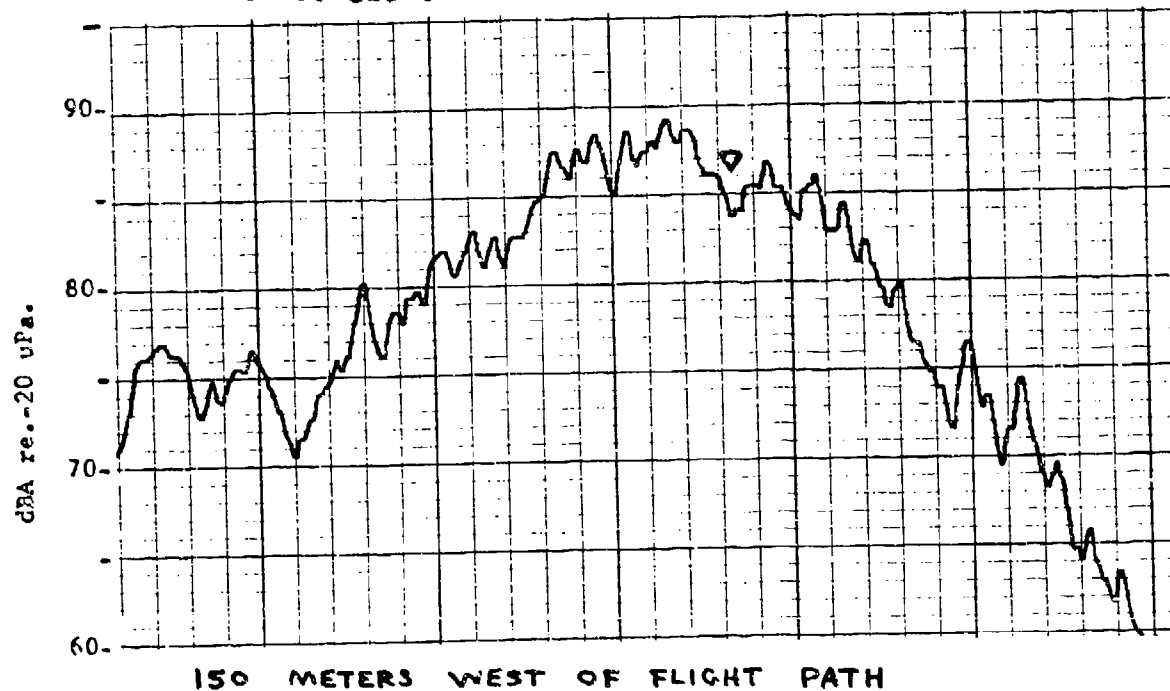
NOISE LEVEL TIME HISTORIES  
VERTOL CH-47C HELICOPTER  
6° APPROACH

RUN 13

TABLE H-IX

▽ = CENTER CROSSING

← 10 SEC →



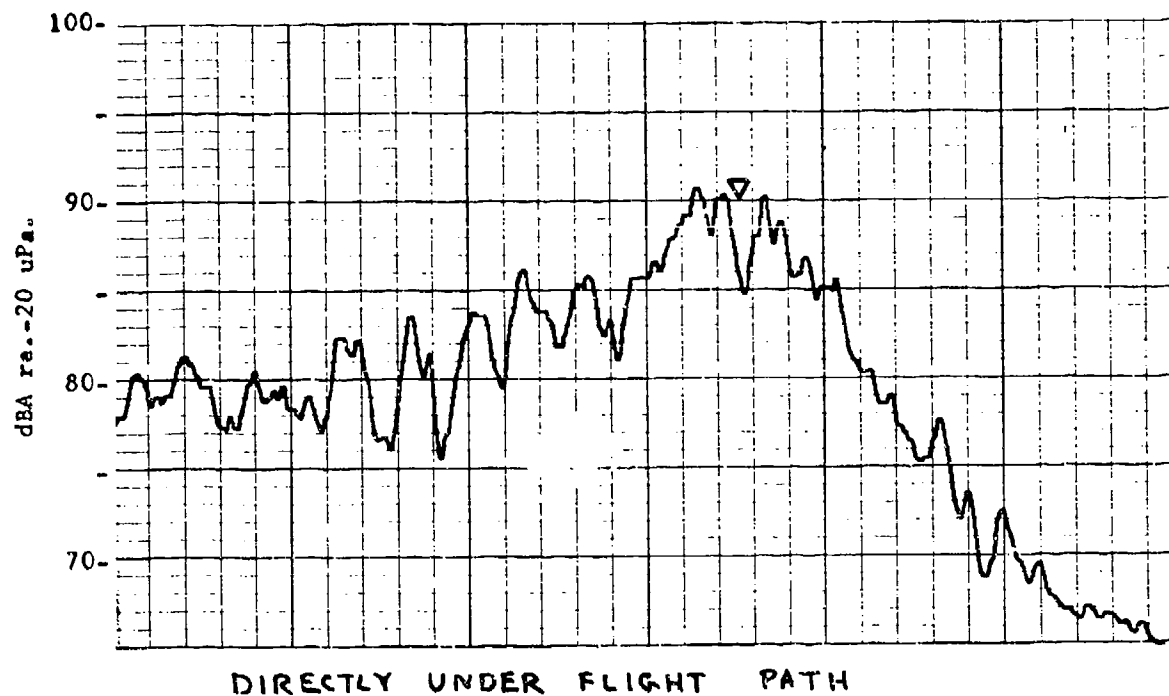
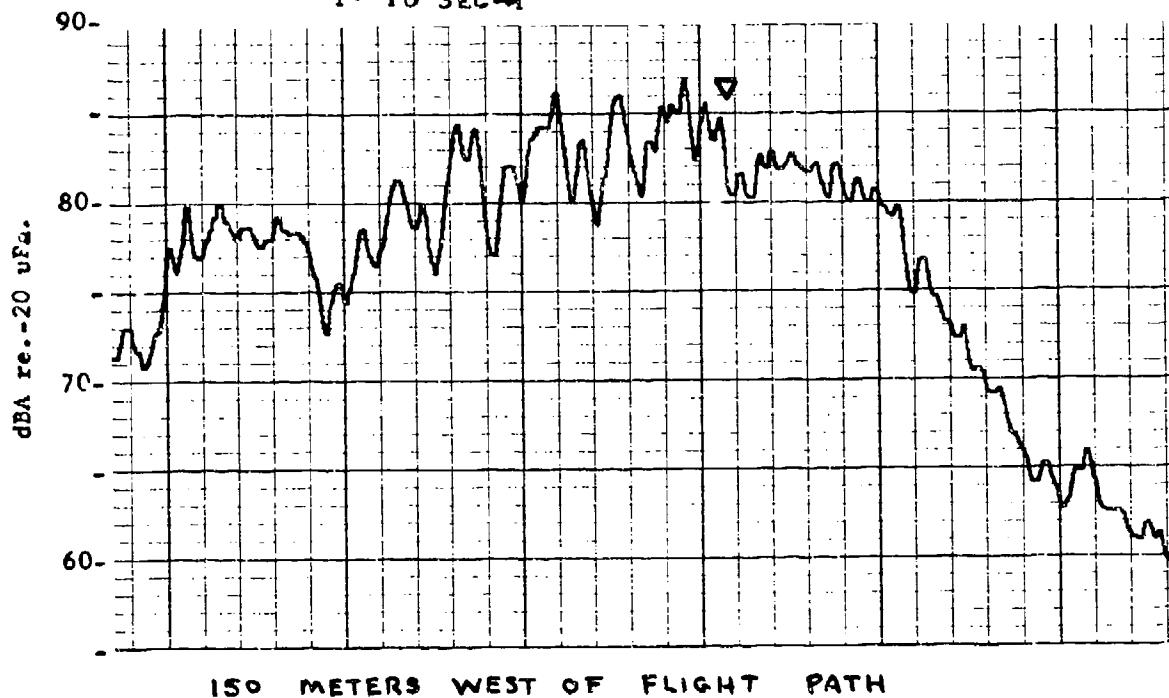
NOISE LEVEL TIME HISTORIES  
VERTOL CH-47C HELICOPTER  
9° APPROACH

RUN 20

TABLE H-IX

▽ = CENTER CROSSING

←10 SEC→



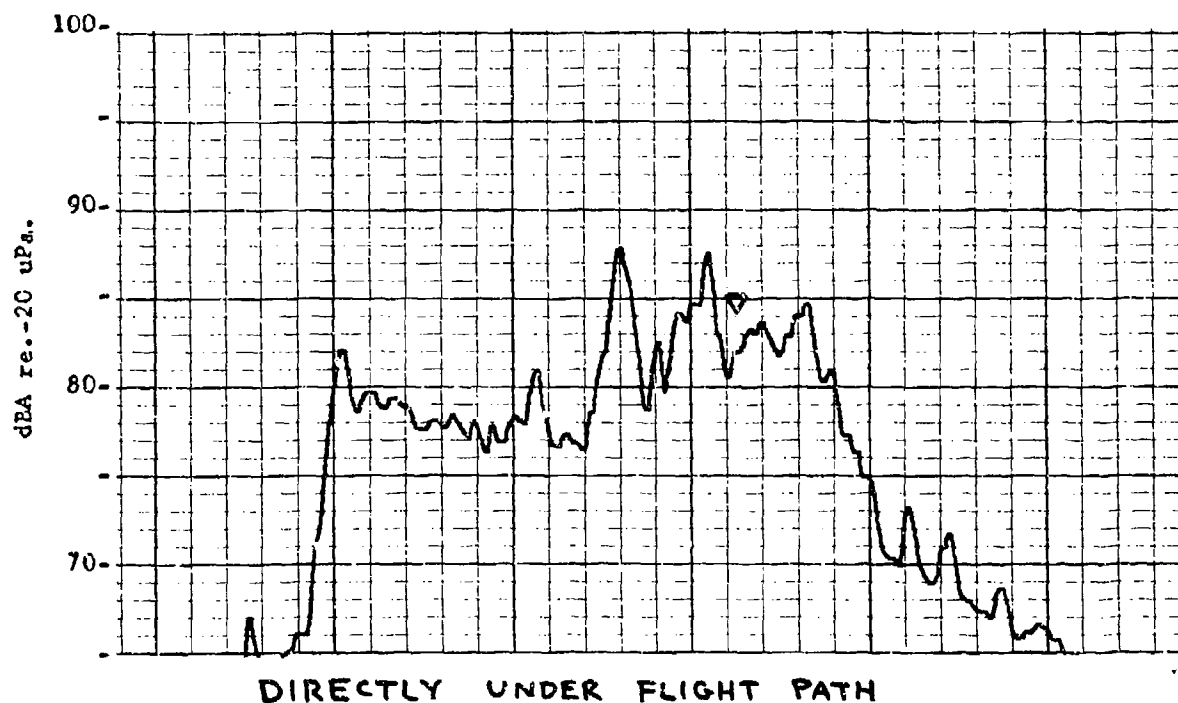
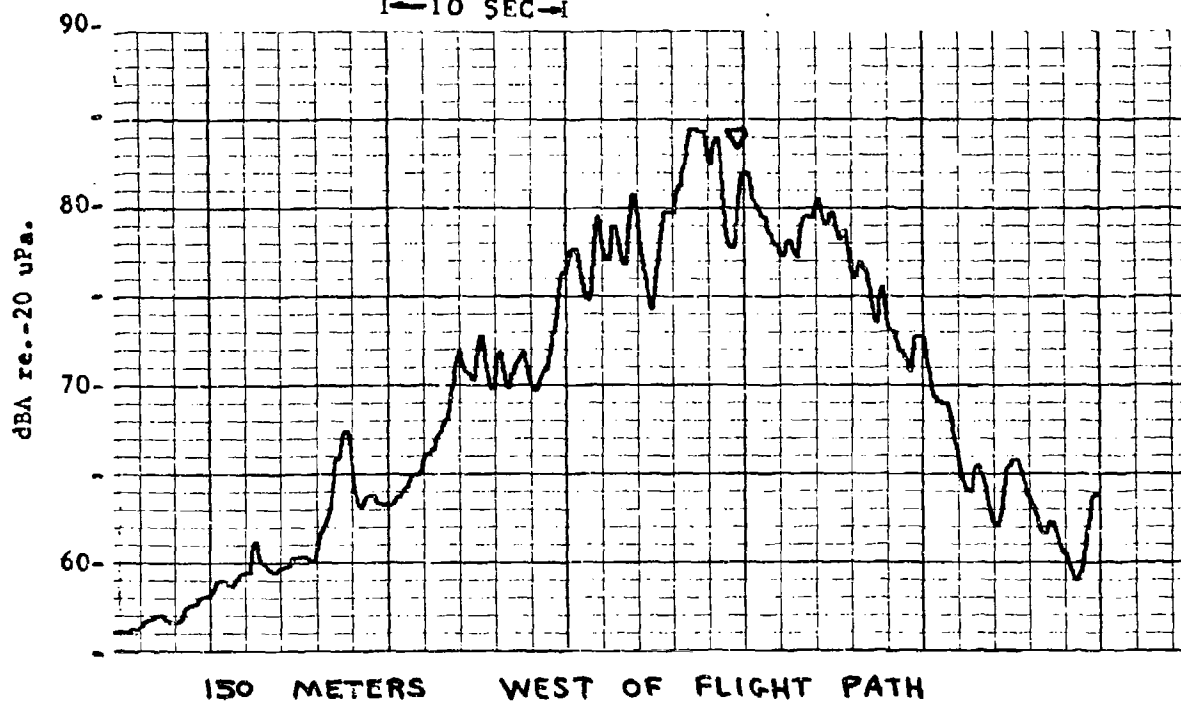
NOISE LEVEL TIME HISTORIES  
VERTOL CH-47C HELICOPTER  
LEVEL FLYOVER - 60 KTS

RUN 18

TABLE H-IX

10 SEC

▽ = CENTER CROSSING



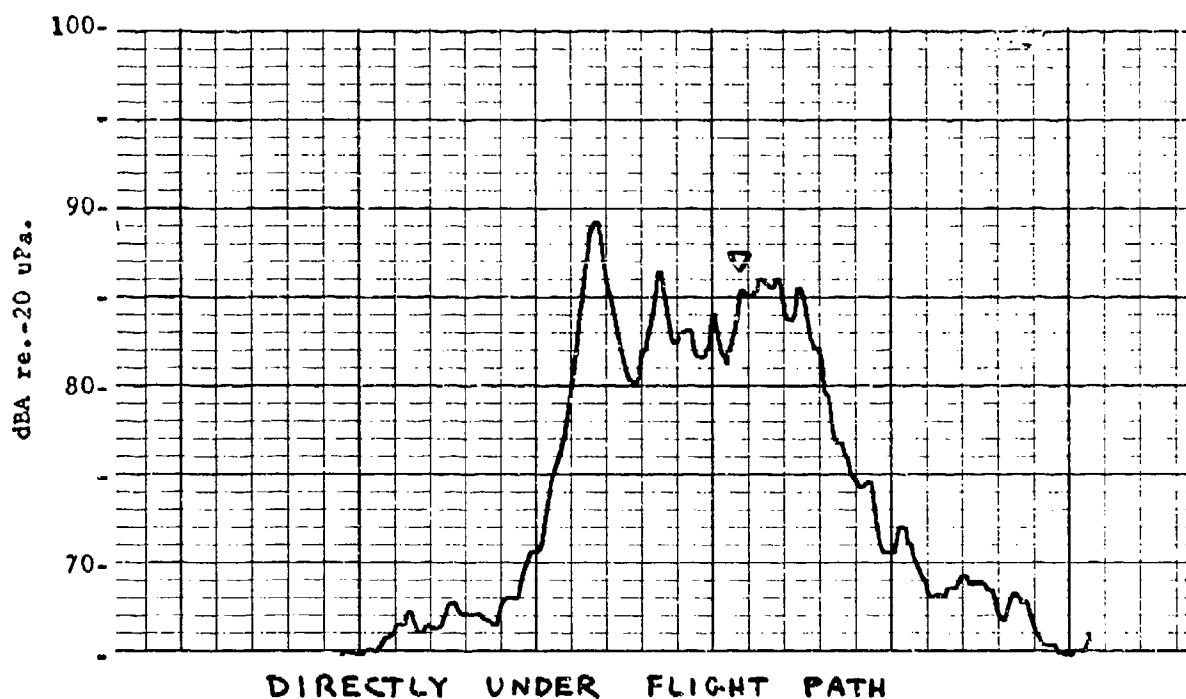
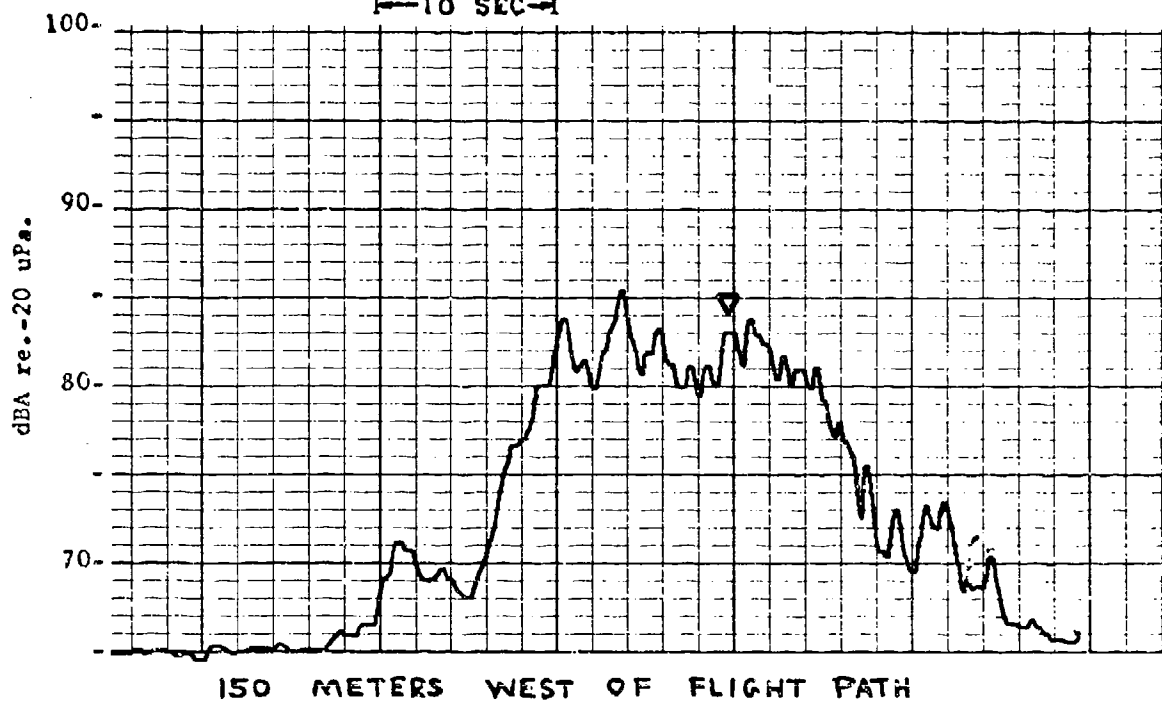
NOISE LEVEL TIME HISTORIES  
VERTOL CH-47C HELICOPTER  
LEVEL FLYOVER - 100 KTS

RUN 22

TABLE H-IX

▽ = CENTER CROSSING

10 SEC



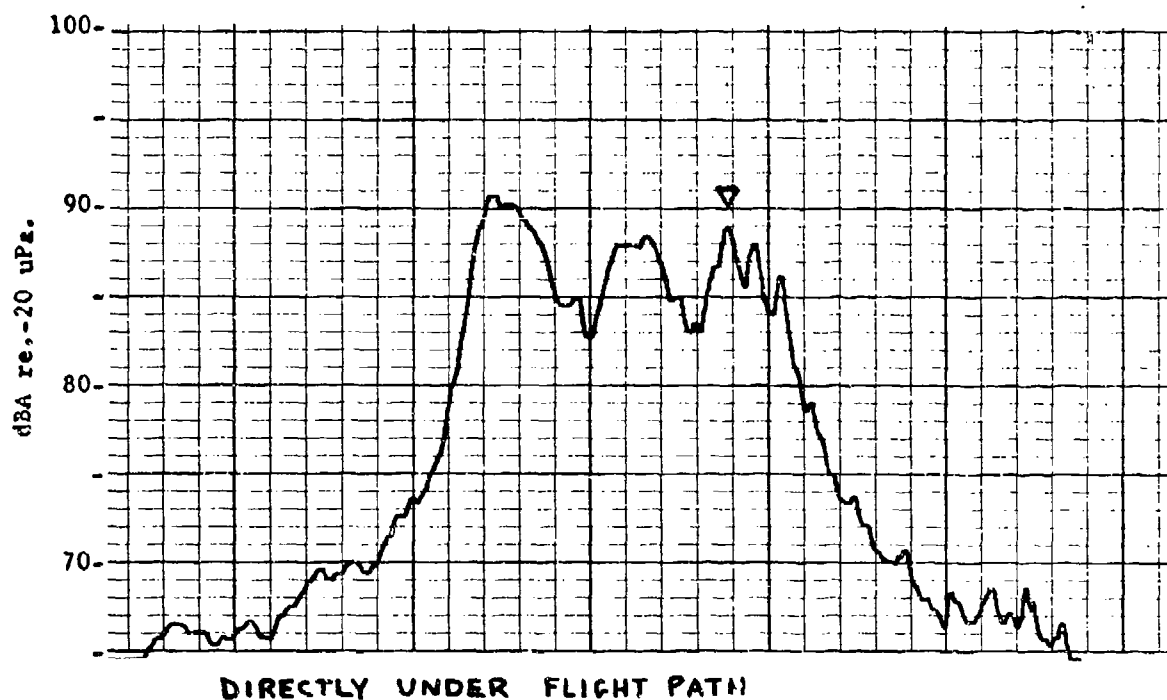
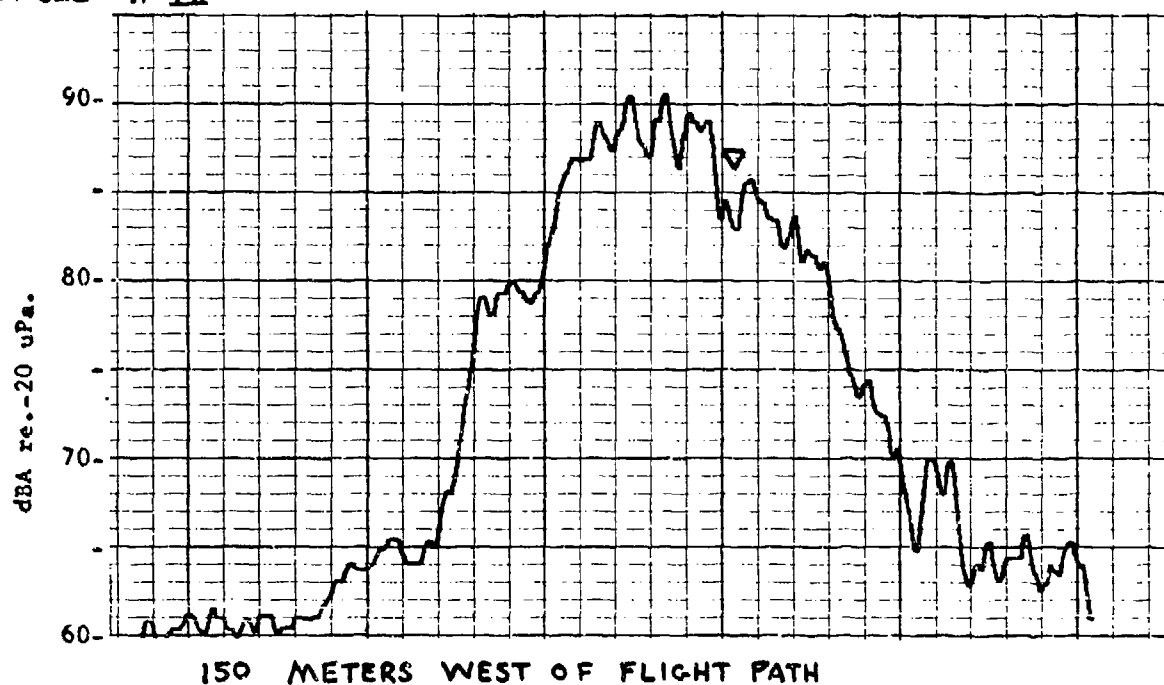
NOISE LEVEL TIME HISTORIES  
VERTOL CH-47 C HELICOPTER  
LEVEL FLYOVER - 126 KTS

RUN 30

TABLE H-IX

10 SEC

▽ = CENTER CROSSING



NOISE LEVEL TIME HISTORIES  
VERTOL CH-47C HELICOPTER  
LEVEL FLYOVER - 141 KTS

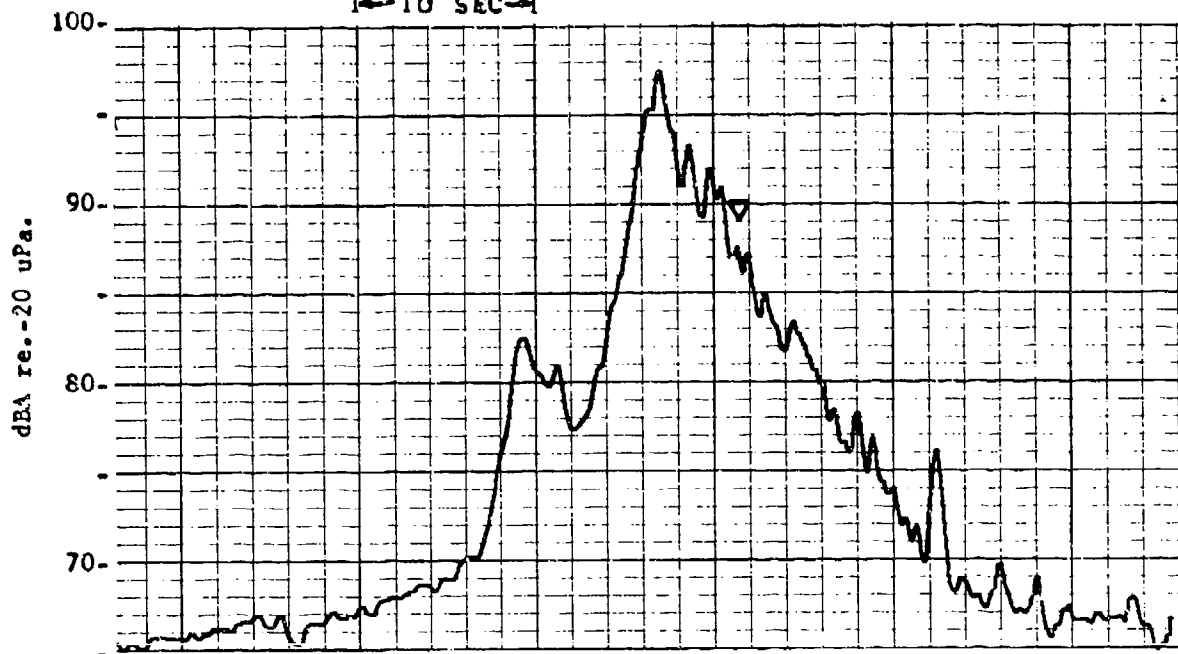
RUN 24



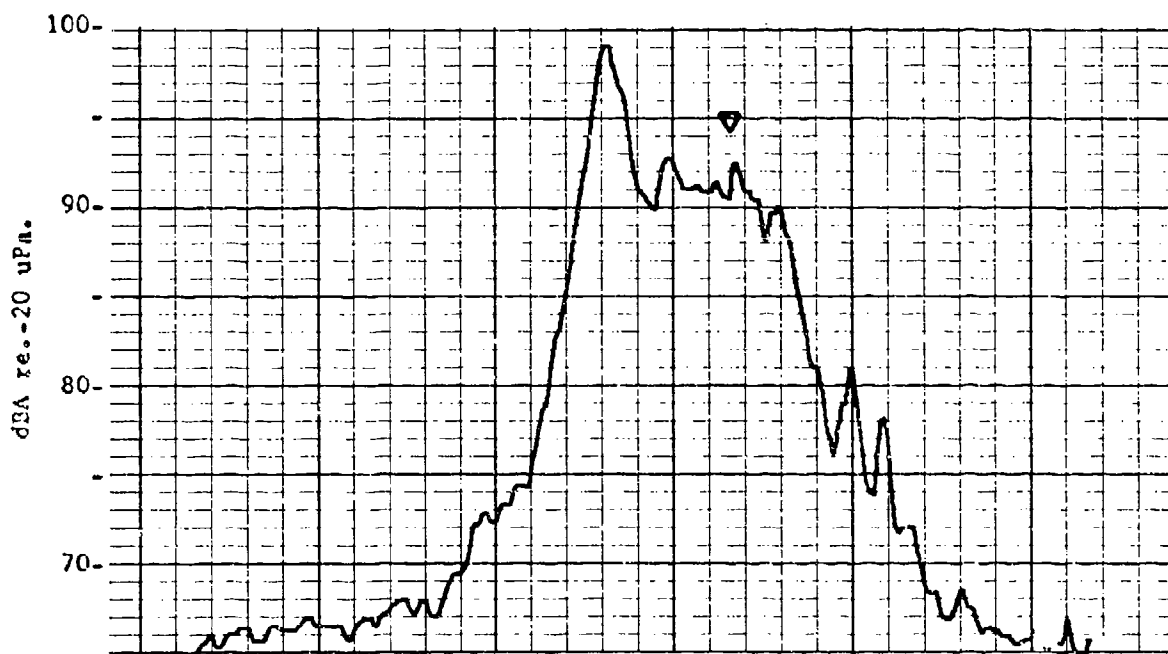
TABLE H-IX

▽ = CENTER CROSSING

10 SEC



150 METERS WEST OF FLIGHT PATH



DIRECTLY UNDER FLIGHT PATH

NOISE LEVEL TIME HISTORIES  
VERTOL CH-47C HELICOPTER  
LEVEL FLYOVER - 150 KTS

RUN 28

**SUPPLEMENTARY**

**INFORMATION**

1. Report No. FAA-RD-77-57, II	2. Government Accession No.	3. Recipient's Catalog No.
4. Title and Subtitle Helicopter Noise Measurements DATA REPORT -- Volume II Helicopter Models: Bell 212 (UH-1N), Sikorsky S-61 (SH-3A), Sikorsky S-64 "Skycrane" (CH-54B), Boeing Vertol "Chinook" (CH-47C)	5. Report Date April 1977	6. Performing Organization Code ARD-550
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15. Supplementary Notes Refer to the main text in Volume I which describes the test program and data presentation format.		
16. Abstract <p>This data report contains the measured noise levels obtained from an FAA helicopter Noise Test Program. The purpose of this test program was to provide a data base for a possible helicopter noise certification rule. The noise data presented in this two volume report is primarily intended as a means to disseminate the available information. Only the measured data is presented in this report. All FAA/DOT data analysis and comparisons will be presented in a later report which is scheduled for distribution in July, 1977.</p> <p>The eight helicopters tested during this Helicopter Noise Test Program constituted a wide range of gross weights and included participation from several helicopter manufacturers. The helicopter models used in this test program were the Hughes 300C, Hughes 500C, Bell 47-G, Bell 206-L, Bell 212 (UH-1N), Sikorsky S-61 (SH-3A), Sikorsky S-64 "Skycrane" (CH-54B), and Boeing Vertol "Chinook" CH-47C. Volume I contains the measured noise levels obtained from the first four helicopters while Volume II contains the data from the remaining four.</p> <p>The test procedure for each helicopter consisted of obtaining noise data during hover, level flyover, and approach conditions. The data presented in this report consists of time histories, 1/3-octave band spectra, EPNL, PNL, dBA, dBD and OASPL noise levels.</p>		
17. Key Words Helicopter Noise Levels; Hover; Level Flyover; Approach; Glide Slope; Time Histories; EPNL, PNL, dBA, dBD and OASPL.	18. Distribution Statement This document is available to the public through the National Technical Information Service Springfield, Virginia 22151	
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